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Abstract

This is the 21st annual national survey of supply and demand for public school teachers. From September 1, 1967 to August 31, 1968, 243,442 persons entered this job market with at least a bachelor's degree. Two estimates of national demand are provided: (1) The estimated number of new teachers needed to attaim minimum levels of quality staffing in 1968 (301,300 in elementary and 198,350 in secondary schools); (2) the number needed in 1968-69, as projected from trends in the improvement of staffing characteristics in recent years (109,300 in elementary and 107,900 in secondary schools). The critical shortage of beginning teachers is expected to continue in secondary school mathematics and sciences. Shortages are likely in special education, vocational-technical courses, women's physical and health education, industrial arts, and elementary schools. Two special surveys of appropriate officials in State departments of education and in 79 of the nation's largest school systems show that shortages of qualified teachers are continuing in all of these assignments. (Author/DE)

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CONTENTS

Foreword 4

Highlights 5

Special Surveys of Teacher Supply and Demand 6

The Supply of New Teachers 8

- Brief Overview of Major Sources of Supply 8
- The New Supply of College Graduates Prepared To Teach 13
- Occupation of Teacher Education Graduates in 1967 20

The Demand for New Teachers 27

- Difference Between Demand for New and Demand for Beginning Teachers 27
- Criteria for Estimating Demand for New Teachers 27
- Characteristics of Demand for New Teachers as Suggested by Assignments in Selected States 34

Supply Compared with Demand for New Teachers 41

- Supply of Graduates Compared with Demand 41
- Trends in Supply and Demand in Reporting States 43
- Supply of Beginning Teachers Compared with Total Number of Teachers Employed 43
- Supply of New Teachers Compared with Demand (QCE) 43
- Supply Compared with Demand (ATCE) for Beginning Teachers 43
- Summary of Comparisons Between Estimates of Teacher Supply and Demand 51
- Supply Compared with Demand for School Librarians and Guidance Counselors 51

Education Completed by Public-School Teachers 52

- Trends in Academic Preparation Completed 52
- Differences Among the States 52
- Preparation of New Teachers 53

Appendix 56

FOREWORD

The NEA Research Division constantly endeavors to improve the research techniques, the accuracy of data, the scope of information collected, and the usefulness of its reports. This 21st annual survey of the supply and demand for public-school teachers continues this tradition.

Continuing the changes initiated in the 1966 edition, the 1968 report provides two estimates of the demand for new teachers: one based on achievement of minimum quality in educational staffing, and one based on trends toward improvement in the quality of the teaching staff. Also, the present study continues the estimation of the demand for beginning teachers as a subgroup of the demand for new teachers.

Users of this report should interpret the estimates only in general terms because additional study is needed on (a) the factors influencing personal decisions on entering, interrupting, re-entering, and leaving the teaching profession; (b) the characteristics of potential teachers and the assignments given to new teachers; and (c) the influence of rapid advances toward improvement in education upon the components of teacher supply and demand.

This report contains a summary of teacher supply and demand conditions reported in late summer 1968 by respondents in state departments of education and in the nation's 79 largest school systems. These two special surveys were designed to supplement the national estimates, identify the status of teacher supply and demand in various types of school systems, and to review the conditions having influence on teacher supply and demand in late summer 1968. The results of these inquiries are given on pages six to seven of this report.

The NEA Research Division appreciates the invaluable assistance of the personnel in state departments of education and teacher preparation institutions who participated in this study. Their willingness to gather and provide basic data, and their continuing interest in this important facet of professional analysis and planning make this report possible. The Division also wishes to thank the state and local school officials who so promptly and willingly responded to the supplemental inquiries on the shortage of teachers.

This report has been prepared by William S. Graybeal, Assistant Director, with the assistance of the Statistics Section of the Research Division.

GLEN ROBINSON
Director, Research Division

HIGHLIGHTS

- A record 243,442 persons completed teacher preparation programs with at least a bachelor's degree between September 1967 and August 31, 1968, an increase of 19.3 percent over the number reported for the previous year.

- The estimated number of new teachers needed to attain minimum levels of quality staffing (Quality Criterion Estimate of teacher demand) in 1968 comprises 301,300 in elementary schools and 198,350 in secondary schools, making a total of 499,650.

- The number of new teachers needed in 1968-69, as projected from trends in the improvement of staffing characteristics in recent years, adjusted for the impact of the Elementary and Secondary Education Act of 1965 (Adjusted Trend Criterion Estimate), comprises 109,300 in elementary schools and 107,900 in secondary schools, making a total of 217,200.

- The Quality Criterion Estimate of demand exceeds the expected supply of new teachers by 278,900, provided the turnover and re-entry rates of qualified experienced teachers approximates that of recent years. This shortage comprises 193,200 teachers at the elementary-school level and 85,700 at the secondary-school level.

- Based on the Adjusted Trend Criterion Estimate of demand, with allowance for the re-entry of qualified experienced teachers as in 1967-68, the critical shortages of beginning teachers are expected to continue in secondary-school mathematics and secondary-school sciences. Shortages are likely in special education, vocational-technical courses, women's physical and health education, industrial arts, and in elementary schools in which it is estimated there is a short supply of beginning teachers.

- Two special surveys of appropriate officials in state departments of education and in 79 of the nation's largest school systems in late summer 1968 show that shortages of qualified teachers are continuing in all of the assignments listed above.

- Despite the record size of the graduating class, 22 states reported having a smaller number of qualified teacher applicants, with the following most frequently identified as contributing to the lower supply: federal programs, greater opportunities in business and industry, and military service, each reported by 11 states; salaries and benefits not attractive in 10 states; and location of vacancies not attractive in 9 states. Among 23 states reporting increased demand for qualified teachers this year the major factors contributing to this condition were new postions related to programs having federal support in 12 states, increased school enrollment in 18 states, and added curricular offerings in 11 states.

SPECIAL SURVEYS OF TEACHER SUPPLY AND DEMAND

Two special surveys were conducted in midsummer 1968 to obtain up-to-date information about: (a) the direction of change, if any, in the factors which influence the supply and demand for public-school teachers; (b) the general status of supply-demand conditions in the states and major cities; (c) the subject areas in which shortages seem to be most widespread; and (d) conditions in the fall of 1968 as compared with one year earlier. This information provides a framework for interpreting the projections of teacher supply and demand in the regular study.

One survey was directed to the person having responsibility for teacher education and certification in each state department of education. These persons were asked to report their general impression of teacher supply and demand conditions in their state as of the first week in August. The second survey was sent to the nation's 79 largest school systems (these systems enroll 50,000 or more pupils, and as a group employ one-fifth of all public-school teachers). Personnel directors in these systems were asked to report by each major assignment area: (a) the extent of difficulty they have encountered in filling teaching positions for 1968-69, (b) whether they have had to employ persons with substandard qualifications, and (c) the number of unfilled positions in the first week of August 1968.

General Conditions Reported by States

State department of education officials in 42 states were able to report the general condition of public-school teacher supply and demand this summer. Their assessment of how the total number of qualified applicants compares with the number of teaching position vacancies in August 1968 was as follows:

- 5 states--substantial shortage of applicants
- 17 states--some shortage of applicants
- 19 states--shortage of applicants in some subject areas and an excess in others
- 1 state--sufficient applicants to fill positions.

None of the states reported having some excess of applicants or having substantial excess of applicants. The remaining eight states did not have sufficient information readily available to allow a valid appraisal of conditions as of the first week in August.

The situation regarding qualified teacher applicants in August 1968 compared with August 1967 was reported by eight states as being more acute, by 25 states as being about the same, and by 8 states as being less acute. None of the states reported the condition to be much more acute or much less acute than one year ago. Nine states did not have sufficient information to report.

Responding to an inquiry about conditions having unusual influence toward decreasing the supply of teachers this year, 19 states reported that the supply of qualified teacher applicants is not smaller than last year. Among the remaining 22 states which responded, the conditions having increased influence toward a low number of qualified applicants were greater opportunities in business and industry, employment opportunities related to federal programs, and requirements of military service, each reported by 11 states; salaries and benefits not attractive in 10 states, location of vacancies not attractive in 9 states, fewer persons completing preparation to enter teaching in 2 states, and fewer persons re-entering teaching, reported by one state.

The states were asked to identify the factors having increased influence if the demand for new teachers is greater than last year. Among the 23 states reporting increased demand the reasons include:

- 18 states--increased school enrollment
- 12 states--new positions resulting from federal legislation
- 11 states--added curricular offerings
- 8 states--reduction in class size
- 2 states--larger number of teachers not returning to their positions.

Twenty of the 43 states responding to this question indicated that the demand for new teachers is not greater than was observed last year.

Shortages by Population Areas

Respondents in 42 states were able to report conditions by population areas in their state. All states but one reported having a shortage of applicants in rural areas; 33 reported a shortage in small cities; 18, in central cities of large urban centers; and 14, in suburban areas.

The numbers of states reporting conditions in these population areas as being more acute than observed last year are as follows:

- 4 states--in rural areas
- 11 states--in small cities
- 7 states--in central cities of large urban centers
- 5 states--in suburban areas.

The second survey queried personnel officers in each of the nation's 79 largest school systems about teacher supply and demand conditions in their systems as of the first week in August. Seventy-six systems reported 5,482 unfilled positions. The 2,665 unfilled positions for elementary schools represent 1.4 percent of the elementary-school teachers in these systems. The 2,817 unfilled positions in secondary schools represent 1.8 percent of the total number of secondary-school teachers in these systems in fall 1968.

Shortages by Teaching Assignment Area

According to state department of education personnel, the acute shortages for teaching assignments in the lower grades are more widespread than are acute shortages at the higher levels. The numbers of states reporting that supply-demand conditions are more acute this year than last year are as follows: lower elementary-school classes, 12 states; upper elementary-school classes, 6 states; senior high school, 6 states; and supporting staff (psychologists, remedial teachers, etc.), 16 states.

According to state department of education personnel, many school systems are encountering extreme difficulty in filling teaching positions for 1968-69 in the following subject areas (most frequently listed by 44 states reporting this information): special education, 30 states; industrial arts, 24 states; librarians, 23 states; mathematics, 20 states; women's physical education, 19 states; special assignments in remedial reading, speech correction, etc., 18 states; special assignments directed to educationally disadvantaged children, 16 states; guidance personnel, 14 states; natural and physical sciences, 12 states; trade-industrial-vocational-technical subjects, 10 states; and elementary-school classes, 7 states. The most frequently listed assignment areas in which states expect school systems generally will have to employ persons with substandard qualifications are special education, 24 states; elementary-school classes, 20 states; mathematics, 16 states; librarian, 16 states; special assignments directed to educationally disadvantaged children, 15 states; special assignments in remedial reading, speech correction, etc., 15 states; industrial arts, 14 states; natural and physical sciences, 14 states; guidance personnel, 14 states; trade-industrial-vocational-technical classes, 11 states; physical education (women), 10 states; and English language arts, 10 states.

The assignments identified in the annual national survey as having an inadequate supply of teachers are also reported as being in short supply by significant numbers of large school systems. The most frequently identified assignments these school systems report having extreme difficulty in filling and the numbers of unfilled positions in early August are as follows:

Assignment	Number of school systems reporting having EXTREME DIFFICULTY in filling position	Number of positions not filled in August in the large school systems
Industrial arts	45	284
Special education	32	867
Mathematics	27	382
Trade, industrial, vocational	20	89
School psychologists ..	15	91
Physical education (women)	13	180
Remedial reading, speech, etc.	13	153
Librarians	11	124
Elementary, regular instruction	10	2,123
Natural and physical sciences	10	193
Instruction of educationally disadvantaged	10	148

Supporting these reports of shortages are the relatively large numbers of these large school systems which report they have had to employ persons with substandard qualifications in these assignment areas for 1968-69: 21, industrial arts; 27, special education; 15, mathematics; 11, trade-industrial-vocational-technical courses; 17, regular instruction in elementary grades; 7, natural and physical sciences; and 6, women teachers of physical and health education.

THE SUPPLY OF NEW TEACHERS

Most of the qualified new teachers are supplied from the following sources: (a) graduates currently completing teacher education programs, (b) former teachers currently interested in re-entering classroom teaching, and (c) teacher education graduates of previous years currently interested in entering the profession for the first time. The small remaining portion of the supply of new teachers comes from the pool of qualified teachers who have been assigned to nonteaching positions in the public schools, or have been teaching in higher education, and the pool of persons who have obtained through experience and specialized training the skills which will allow their placement in certain teaching positions, at least on a temporary basis.

The major objective of this section is to review the new supply of persons currently completing teacher education programs. The size of the pools of qualified persons who may enter teaching positions is estimated. However, it is difficult to identify the extent to which persons from these sources may be interested in and acceptable for employment.

Brief Overview of Major Sources of Supply

College Graduates Completing Teacher Education Programs in 1968

The summary provided in Table 1 shows there are expected to be 92,608 prospective elementary-school teachers and 136,242 prospective secondary-school teachers who will be completing their preparation with at least a bachelor's degree in time for entry into the teaching profession at the beginning of the 1968-69 session. Also, 5,711 prospective teachers of special education, 1,891 school librarians, and 3,418 guidance counselors are expected to be completing their professional preparation. (At least 3,572 additional persons are expected to have completed preparation for employment as school psychologists, school social workers, school nurses, or other supporting positions.)

Not all persons in this gross supply of new teachers will be available for immediate entry into classrooms. The proportions of teacher education graduates, for whom follow-up information is available, who actually enter active teaching status during the subsequent session have ranged from 78.0 to 83.3 percent for elementary- and 64.3 to 69.2 percent for high-school teachers during the past 10 years. Applying the midpoint of these ranges to the estimated number of graduates provides an estimate of about 74,688 elementary- and 90,942 high-school teachers who may be expected to enter the profession from this source in the fall of 1968.

Qualified Former Teachers

Some of the teachers who leave their positions may be expected to return to the profession. In addition to many persons on leaves of absence, a significant number of teachers return to the classroom following widely varied lengths of interruptions. A survey conducted by the NEA Research Division in 1959-60 noted that 44.1 percent of the public-school teachers had interrupted their careers since beginning teaching. The mean length of interruption was 8.3 years. About 7.5 percent of the teachers had interrupted their careers for longer than 15 years. As may be expected, interruption in their teaching careers was much more widespread among married women teachers (61.1 percent) than among either single women teachers (24.4 percent) or men teachers (24.0 percent). Only 37.8 percent of teachers in a similar study in 1965-66 reported having interrupted their careers since beginning teaching. Interruption continued to be more widespread among married women teachers (53.5 percent) than among single women teachers (15.7 percent) or men teachers (19.5 percent).

The pool of former teachers below the college level who had completed four years of college and were unemployed in 1960 was estimated by the U. S. Bureau of the Census to comprise about 304,460 persons. Problems of definition of teacher, particularly in the vocational areas, by the census enumerators make this a very general estimate. Almost 40,000 of the persons enumerated in this pool were age 65 or more; 11,900 were between ages 60 and 64. An assumption that this pool contains the 20-year accumulation of about 1.5 percent of the teachers each year suggests that this reserve has increased to about 390,000 persons during the past seven years. However, the enlargement of employment opportunities in schools and in other occupations may be reducing the number of persons in this pool to minimum levels this year.

TABLE 1A. -- COLLEGE STUDENTS COMPLETING BACHELOR'S DEGREE, 1968 AND 1967, BY FIELD

LINE NO	TYPE OF PREPARATION	1968			1967			1967 TO 1968	
		MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	NET CHANGE	PERCENT CHANGE
1	2	3	4	5	6	7	8	9	10
	ELEMENTARY-SCHOOL TOTAL	7,916	70,199	80,407	7,311	64,208	71,519	+ 8,888	+ 12.4
1	REGULAR INSTRUCTION	7,353	68,435	78,080	6,832	62,731	69,563	+ 8,517	+ 12.2
	SELECTED SUBJECTS(TOTAL)	563	1,764	2,327	479	1,477	1,956	+ 371	+ 19.0
2	ART	116	634	750	91	550	641	+ 109	+ 17.0
3	FOREIGN LANGUAGES	11	287	298	14	170	184	+ 114	+ 62.0
4	MUSIC	207	563	770	165	509	674	+ 96	+ 14.2
5	PHYSICAL & HEALTH EDUCATION	229	280	509	209	248	457	+ 52	+ 11.4
	SECONDARY SCHOOL								
6	AGRICULTURE	1,124	37	1,187	1,101	9	1,110	+ 77	+ 6.9
7	ART	1,307	3,320	4,856	1,067	2,927	3,994	+ 862	+ 21.6
8	BUSINESS EDUCATION	2,341	5,489	8,169	1,927	4,783	6,710	+ 1,459	+ 21.7
9	DISTRIBUTIVE EDUCATION	208	178	389	178	138	316	+ 73	+ 23.1
	ENGLISH LANGUAGE ARTS(TOTAL)	5,172	17,256	23,158	4,331	15,536	19,867	+ 3,291	+ 16.6
10	ENGLISH	4,199	15,051	19,938	3,574	13,697	17,271	+ 2,667	+ 15.4
11	JOURNALISM	57	115	172	31	102	133	+ 39	+ 29.3
12	SPEECH AND DRAMATIC ARTS	916	2,090	3,043	726	1,737	2,463	+ 585	+ 23.8
	FOREIGN LANGUAGES(TOTAL)	1,475	5,970	7,659	1,255	5,394	6,649	+ 1,010	+ 15.2
13	FRENCH	448	2,812	3,468	372	2,536	2,908	+ 560	+ 19.3
14	GERMAN	241	510	751	207	548	755	- 4	- .5
15	LATIN	114	263	377	88	246	334	+ 43	+ 12.9
16	RUSSIAN	30	80	110	33	79	112	- 2	- 1.8
17	SPANISH	617	2,247	2,870	519	1,918	2,437	+ 433	+ 17.8
18	OTHER	25	58	83	36	67	103	- 20	- 19.4
19	HOME ECONOMICS	46	5,925	6,175	3	5,409	5,412	+ 763	+ 14.1
20	INDUSTRIAL ARTS	3,707	29	3,819	3,179	19	3,198	+ 621	+ 19.4
21	JUNIOR HIGH SCHOOL(GENERAL)	386	343	729	285	262	547	+ 182	+ 33.3
22	MATHEMATICS	4,329	4,375	9,064	3,994	3,808	7,802	+ 1,262	+ 16.2
23	MUSIC	2,585	3,275	6,061	2,169	2,833	5,002	+ 1,059	+ 21.2
24	PHYSICAL & HEALTH EDUCATION	7,694	4,959	13,270	6,673	4,221	10,894	+ 2,376	+ 21.8
	NATURAL & PHYSICAL SCIENCES (TOTAL)	5,720	3,565	9,587	5,210	3,211	8,421	+ 1,166	+ 13.8
25	SUBJECT NOT SPECIFIED	744	510	1,254	652	364	1,016	+ 238	+ 23.4
26	GENERAL SCIENCE	960	550	1,551	822	391	1,213	+ 338	+ 27.9
27	BIOLOGY	2,935	2,094	5,242	2,762	2,050	4,812	+ 430	+ 8.9
28	CHEMISTRY	705	332	1,074	683	357	1,040	+ 34	+ 3.3
29	PHYSICS	376	79	466	291	49	340	+ 126	+ 37.1
	SOCIAL STUDIES(TOTAL)	13,305	8,930	23,009	11,400	7,772	19,172	+ 3,837	+ 20.0
30	SUBJECT NOT SPECIFIED	6,240	3,827	10,767	5,640	3,752	9,392	+ 1,375	+ 14.6
31	HISTORY, GEOGRAPHY	5,028	3,550	8,631	4,205	2,895	7,100	+ 1,531	+ 21.6
32	ECONOMICS, SOCIOLOGY, PSYCHOLOGY	845	792	1,643	633	571	1,204	+ 439	+ 36.5
33	OTHER SOCIAL STUDIES	1,192	761	1,968	922	554	1,476	+ 492	+ 33.3
34	TRADE, INDUSTRY, TECHNOLOGY	475	27	512	377	21	398	+ 114	+ 28.6
35	OTHER SECONDARY SUBJECTS	193	257	456	248	323	571	- 115	- 20.1
	SECONDARY-SCHOOL TOTAL	50,067	63,935	118,100	43,397	56,666	100,063	+18,037	+ 18.0
	UNGRADED								
36	SPECIAL EDUCATION	702	3,650	4,401	591	2,902	3,493	+ 908	+ 26.0
37	LIBRARIAN	71	717	830	56	668	724	+ 106	+ 14.6
38	GUIDANCE COUNSELOR	125	94	219	131	101	232	- 13	- 5.6
39	SCHOOL PSYCHOLOGIST	18	20	38	28	25	53	- 15	- 28.3
40	SCHOOL SOCIAL WORKER	2	10	12	2	11	13	- 1	- 7.7
41	SCHOOL NURSE	...	234	234	2	265	267	- 33	- 12.4
42	OTHER UNGRADED	397	920	1,317	388	942	1,330	- 13	- 1.0
	GRAND TOTAL	59,298	139,779	205,558	51,906	125,788	177,694	+27,864	+ 15.7

Explanatory Comments on Tables IA and IB

1. Coverage. This 21st annual national survey comprises reports from almost all colleges and universities offering courses leading to the standard certificate for teaching in public schools of the state in which the institution is situated. Thus, Table 1 provides complete coverage of 48 states and the District of Columbia, and almost complete coverage of two states. The figures given for 1967 are for the end of the year and reflect the total number graduating in 1967 who met certificate requirements. The figures given for 1968 are estimates of the numbers of persons expected to complete their preparation before September 1968. In the report issued for 1967 the total 1967 production was estimated to be 227,088. The total number of persons completing preparation in 1967 was reported in the present study to be 204,051, a decrease of 10.1 percent under the number estimated one year earlier. The overestimate of the new supply of graduates in 1967 occurred almost entirely in four states which have large numbers of graduates; two of these indicated that a few institutions did not participate in the 1968 survey.

2. Classification. Each graduate is counted only once. Those prepared for elementary-school assignments are considered separately from those prepared for similar assignments in secondary schools. Where the graduate is completing preparation for more than one assignment area, he is counted in the field of major concentration.

3. Numbers Prepared for Specific Subjects. Students broadly prepared in English language arts, foreign languages, science, and social studies may have been listed in the general categories or in the specific component subjects. Therefore, the supply listed for a specific subject within these groups may be a minimum rather than an actual estimate of the new supply for the subject. As a result, the comparisons of estimated supply and demand in this study are directed to these major groupings rather than to the specific component subjects. Also, some institutions reported only the total number of graduates in the major subject classifications; therefore, the sum of the entries for components is not always equal to the total listed.

4. Other (lines 35 and 42). Most institutions reporting persons in these lines did not identify the type of preparation being completed. A few institutions reported in this category the numbers of persons completing preparation for administrative or supervisory assignments.

5. Fields Covering 12 Grades. Some students are prepared to teach a subject at all grade levels. The present study provides for listing as elementary the numbers expected to teach selected subjects in elementary school. Also, persons prepared to teach special education classes and to fill supporting instructional assignments are listed separately as completing preparation for ungraded assignments. In earlier studies these were included in high-school subjects.

6. Fifth-Year or Master's Degree Requirements. This report provides a summary of persons completing preparation at the bachelor's degree level and at the fifth-year or master's degree level. The information for the advanced degree classification is likely to be underreported because institutions may not have been prepared to report information in this classification.

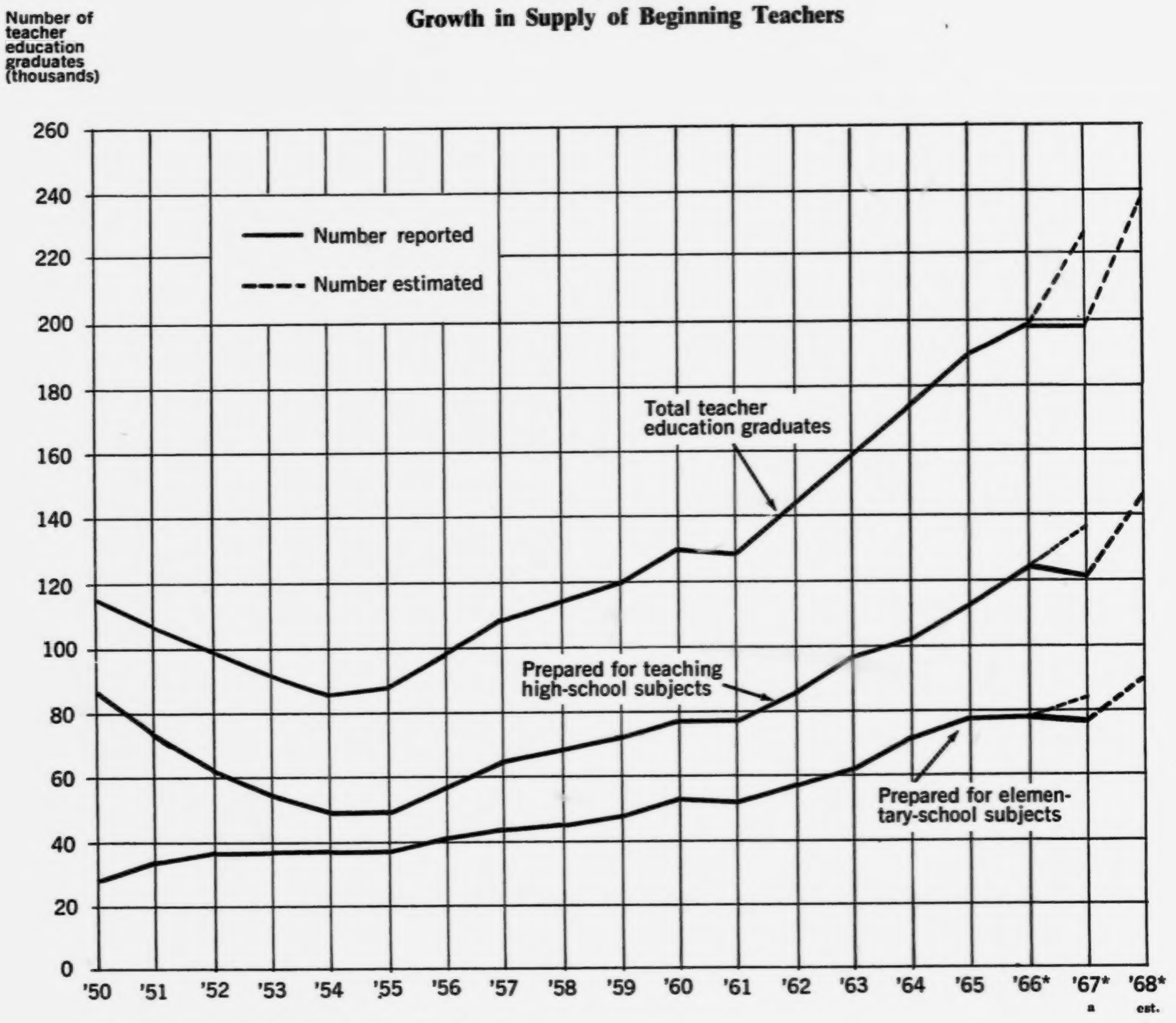
7. Less-Than-Degree Certificates. Although the bachelor's degree is now generally recognized as a minimum requirement for admission to teaching, a few states continue to issue certificates on the basis of less than a bachelor's degree. These partially prepared students are not included in this report.

8. State Reports. Many state departments of education recognize the need for much more detailed information concerning the teacher supply-demand situation in their own states. To meet this need, they conduct state-wide studies which include numerous more specific elements. Usually such state studies are conducted by the state officials who collaborate in this annual national study. These state reports contribute to a fuller understanding of local conditions and further strengthen the guidance efforts of counselors in high schools and colleges.

TABLE 18. -- COLLEGE STUDENTS COMPLETING MASTER'S DEGREE AND TOTAL COMPLETING BACHELOR'S AND MASTER'S DEGREES, 1968 AND 1967, BY FIELD

LINE NO. 1	TYPE OF PREPARATION 2	1968 MEN 3	1968 WOMEN 4	1968 TOTAL 5	1967 MEN 6	1967 WOMEN 7	1967 TOTAL 8	1967 TO 1968 NET CHANGE 9	1967 TO 1968 PERCENT CHANGE 10	TOTAL, BACHELOR'S AND MASTER'S 1968 11	TOTAL, BACHELOR'S AND MASTER'S 1967 12	NET CHANGE 13	PERCENT CHANGE 14
	ELEMENTARY-SCHOOL TOTAL	2,040	9,859	12,201	1,479	5,529	7,284	+ 4,917	+ 67.5	92,608	78,803	+13,805	+ 17.5
1	REGULAR INSTRUCTION .	1,955	9,604	11,861	1,409	5,359	7,044	+ 4,817	+ 68.4	89,941	76,607	+13,334	+ 17.4
	SELECTED SUBJECTS (TOTAL)	85	255	340	70	170	240	+ 100	+ 41.7	2,667	2,196	+ 471	+ 21.4
2	ART	19	104	123	26	78	104	+ 19	+ 18.3	873	745	+ 128	+ 17.2
3	FOREIGN LANGUAGES .	5	39	44	6	24	30	+ 14	+ 46.7	342	214	+ 128	+ 59.8
4	MUSIC	16	56	72	19	53	72	...	...	842	746	+ 96	+ 12.9
5	PHYSICAL & HEALTH EDUCATION	45	56	101	19	15	34	+ 67	+197.1	610	491	+ 119	+ 24.2
	SECONDARY SCHOOL												
6	AGRICULTURE	218	35	860	200	56	860	...	...	2,047	1,970	+ 77	+ 3.9
7	ART	273	673	946	184	328	512	+ 434	+ 84.8	5,802	4,506	+ 1,296	+ 28.8
8	BUSINESS EDUCATION ..	340	492	832	286	391	677	+ 155	+ 22.9	9,001	7,387	+ 1,614	+ 21.8
9	DISTRIBUTIVE EDUC. ..	44	42	86	39	30	69	+ 17	+ 24.6	475	385	+ 90	+ 23.4
	ENGLISH LANGUAGE ARTS (TOTAL)	1,067	2,306	3,373	716	1,696	2,412	+ 961	+ 39.8	26,531	22,279	+ 4,252	+ 19.1
10	ENGLISH	947	2,010	2,957	621	1,511	2,132	+ 825	+ 38.7	22,895	19,403	+ 3,492	+ 18.0
11	JOURNALISM	17	17	34	11	13	24	+ 10	+ 41.7	206	157	+ 49	+ 31.2
12	SPEECH & DRAMATIC ARTS	103	279	382	84	172	256	+ 126	+ 49.2	3,430	2,719	+ 711	+ 26.1
	FOREIGN LANGUAGES (TOTAL)	380	986	1,366	284	648	932	+ 434	+ 46.6	9,025	7,581	+ 1,444	+ 19.0
13	FRENCH	201	622	823	84	255	339	+ 484	+142.8	4,291	3,247	+ 1,044	+ 32.2
14	GERMAN	45	68	113	51	96	147	- 34	- 23.1	864	902	- 38	- 4.2
15	LATIN	12	13	25	12	20	32	- 7	- 21.9	402	366	+ 36	+ 9.8
16	RUSSIAN	8	23	31	10	7	17	+ 14	+ 82.4	141	129	+ 12	+ 9.3
17	SPANISH	104	245	349	115	238	353	- 4	- 1.1	3,219	2,790	+ 429	+ 15.4
18	OTHER	10	15	25	12	32	44	- 19	- 43.2	108	147	- 39	- 26.5
19	HOME ECONOMICS	2	603	605	2	403	405	+ 200	+ 49.4	6,780	5,817	+ 963	+ 16.6
20	INDUSTRIAL ARTS	518	1	519	351	4	355	+ 164	+ 46.2	4,338	3,553	+ 785	+ 22.1
21	JR. HIGH SCHOOL (GENERAL)	12	29	41	10	18	28	+ 13	+ 46.4	770	575	+ 195	+ 33.9
22	MATHEMATICS	705	580	1,285	603	379	982	+ 303	+ 30.9	10,349	8,784	+ 1,565	+ 17.8
23	MUSIC	302	270	572	241	175	416	+ 156	+ 37.5	6,633	5,418	+ 1,215	+ 22.4
24	PHYSICAL & HEALTH EDUCATION	769	491	1,260	625	302	927	+ 333	+ 35.9	14,530	11,821	+ 2,709	+ 22.9
	NATURAL & PHYSICAL SCIENCES(TOTAL) ..	1,107	672	1,779	985	562	1,547	+ 232	+ 15.0	11,366	9,968	+ 1,398	+ 14.0
25	SUBJECT NOT SPEC. .	147	87	234	144	83	227	+ 7	+ 3.1	1,488	1,243	+ 245	+ 19.7
26	GENERAL SCIENCE ...	357	252	609	234	96	330	+ 279	+ 84.5	2,160	1,543	+ 617	+ 40.0
27	BIOLOGY	439	259	698	424	293	717	- 19	- 2.6	5,940	5,529	+ 411	+ 7.4
28	CHEMISTRY	108	59	167	113	72	185	- 18	- 9.7	1,241	1,225	+ 16	+ 1.3
29	PHYSICS	56	15	71	70	18	88	- 17	- 19.3	537	428	+ 109	+ 25.5
	SOCIAL STUDIES (TOTAL)	2,130	1,912	4,042	1,656	1,056	2,712	+ 1,330	+ 49.0	27,051	21,884	+ 5,167	+ 23.6
30	SUBJECT NOT SPEC. .	1,290	873	2,163	951	543	1,494	+ 669	+ 44.8	12,930	10,886	+ 2,044	+ 18.8
31	HISTORY, GEOGRAPHY.	632	749	1,381	538	368	906	+ 475	+ 52.4	10,012	8,006	+ 2,006	+ 25.1
32	ECONOMICS, SOCIOLOGY, PSYCHOLOGY.	79	177	256	59	48	107	+ 149	+139.3	1,899	1,311	+ 588	+ 44.9
33	OTHER SOCIAL STUDIES	129	113	242	108	97	205	+ 37	+ 18.0	2,210	1,681	+ 529	+ 31.5
34	TRADE, INDUSTRY, TECHNOLOGY	89	8	97	61	4	65	+ 32	+ 49.2	609	463	+ 146	+ 31.5
35	OTHER SECONDARY SUBJ.	322	157	479	294	147	441	+ 38	+ 8.6	935	1,012	- 77	- 7.6
	SECONDARY-SCHOOL TOTAL	8,278	9,257	18,142	6,537	6,199	13,340	+ 4,802	+ 36.0	136,242	113,403	+22,839	+ 20.1
	UNGRADED												
36	SPECIAL EDUCATION ...	346	935	1,310	258	753	1,042	+ 268	+ 25.7	5,711	4,535	+ 1,176	+ 25.9
37	LIBRARIAN	176	858	1,061	136	532	696	+ 365	+ 52.4	1,891	1,420	+ 471	+ 33.2
38	GUIDANCE COUNSELOR ..	1,616	1,429	3,199	1,464	1,263	2,880	+ 319	+ 11.1	3,418	3,112	+ 306	+ 9.8
39	SCHOOL PSYCHOLOGIST .	187	238	428	114	119	234	+ 194	+ 82.9	466	287	+ 179	+ 62.4
40	SCHOOL SOCIAL WORKER.	14	30	44	16	32	48	- 4	- 8.3	56	61	- 5	- 8.2
41	SCHOOL NURSE	25	24	49	19	26	45	+ 4	+ 8.9	283	312	- 29	- 9.3
42	OTHER UNGRADED	796	654	1,450	475	313	788	+ 662	+ 84.0	2,767	2,118	+ 649	+ 30.6
	GRAND TOTAL	13,478	23,284	37,884	10,498	14,766	26,357	+11,527	+ 43.7	243,442	204,051	+39,391	+ 19.3

FIGURE I
Growth in Supply of Beginning Teachers



* Grouping by area of preparation as noted in Table 2.

a A few institutions in four states did not respond in 1968.

NEA Research Division

Persons in this pool provide a reservoir from which some qualified teachers may be drawn to complete the session for teachers who terminate their contracts during the year, to fill new positions which may be created during the school year, to accept on a year-to-year basis employment in teaching positions which would normally be vacant owing to a critical shortage, and to serve as substitute teachers. Others in this pool who prefer to remain unemployed during normal economic conditions probably would return to employment, if requested, in the event of a critical shortage.

Teacher Education Graduates Who Postponed Entry into Profession

About 10 percent of the teacher education graduates for whom follow-up information is available do not enter the profession immediately but continue their schooling, enter military service, or begin full-time homemaking responsibilities. (A summary of current conditions is given later in this section.) Many of these potential teachers will enter the profession following completion of advanced schooling or a change in the conditions that influenced them to postpone employment as teachers.

An assumption that one-fifth to one-half of the graduates in these classifications normally would be interested and available for employment at a later date suggests that 5,000 to 11,000 persons will enter this reserve this year.

Other Sources of New Teachers

Teaching is a second career for many persons who retire at a relatively early age from military or civil service. Many of them normally complete the teacher education programs and are included in the estimates of the number of new teachers being trained. Some persons in this pool who have the baccalaureate degree and the personal qualifications for successful teaching but have not completed teacher education programs are being placed in positions in which critical shortages dictate such employment.

Some teachers enter or re-enter classrooms from nonteaching positions in education, the graduating class of colleges and universities which do not have approved teacher education programs, teaching positions in post-high-school institutions or preschool classrooms, military service, and a wide variety of other occupations. Precise information is not available about the numbers of persons in these sources who may become part of the total supply of new teachers.

The New Supply of College Graduates Prepared To Teach

Summarized in Table 1 are the numbers of men and women who are expected to complete teacher education programs with the bachelor's or master's degree between September 1, 1967, and August 31, 1968.

Table 1 shows that a record of at least 92,608 persons are expected to complete their preparation for employment as regular classroom teachers in elementary schools in fall 1968. The enlargement beyond 1967 levels by 13,805 persons is an increase of 17.5 percent. The 12,201 who will have the master's degree represent 13.0 percent of all persons completing for the first time the requirements for entering the profession in regular elementary-school teaching assignments.

At the secondary-school level the number of graduates completing preparation to teach with a bachelor's degree in 1968 is an increase of 18,037, or 18.0 percent, and the number completing preparation with a master's degree is an increase of 4,802 persons, or 36.0 percent. The estimate of at least 136,242 persons completing preparation to teach secondary-school subjects is an increase of 20.1 percent over the number completing their preparation in 1967. The 18,142 having the master's degree represent 13.3 percent of the total number of graduates completing preparation to teach regular subjects in secondary schools.

The percents of increase over the actual numbers of graduates reported for 1967 are misleading in view of the unusually large difference between the actual numbers of 1967 graduates reported in 1968 and the estimated numbers of 1967 graduates reported in 1967.

The estimate of 92,608 persons expected to complete preparation for elementary-school assignments in 1968 is an increase of only 7,250 graduates, or 8.5 percent, over the 85,358 similarly estimated in 1967 to be completing their preparation in 1967. The estimate of 136,242 persons expected to complete preparation for secondary-school assignments in 1968 is an increase of only 7,129 graduates, or 5.5 percent, over the 129,113 similarly estimated in 1967 to be completing their preparation in 1967.

The difference between the number estimated in 1967 to be completing their preparation in 1967 and the number reported in 1968 as actually completing their preparation in 1967 is contributed almost entirely by information from four states: California, Illinois, Massachusetts, and New York. In these four states alone the number reported in 1968 to have completed preparation in 1967 is smaller than the 1967 estimate of the number expected to complete preparation in 1967 by 7,593 in elementary-school assignments and by 11,833 in secondary-school assignments. Reasons for this major difference in these four state reports include: (a) Not all institutions responded for the 1968 study, (b) some institutions did not adhere strictly to the definitions, and (c) some prospective graduates may have been drafted.

The ungraded classifications listed in Table 1 are used for the second time this year and, as a result, may not have elicited complete reporting; many institutions may not have had data readily available in these classifications. Growth of 25.9 and 33.2 percent is reported in the numbers of persons completing preparation to teach special education classes and to serve as school librarians, respectively. Graduates in these two classifications have been reported by large numbers of institutions as "other" areas of preparation in earlier studies of this series. Growth is nearly as great among the number of persons prepared to enter the profession as guidance counselors; the 306 persons represent an increase of 9.8 percent over the number reported for 1967.

The numbers reported for school psychologists, school social workers, and school nurses are most likely to be under the actual supply because these positions have not been "written in" widely in earlier studies of this series. With the exception of the increase of 179 in the number completing preparation to be school psychologists, the growth in these areas is small and the changes between 1967 and 1968 are correspondingly small.

Comparison with Other Years

A review of trends in the supply of persons completing their preparation for teaching is provided by Table 2. To provide data groupings comparable with the earlier studies in this

TABLE 2.--COLLEGE GRADUATES PREPARED TO TEACH, BY FIELD, AND PERCENT CHANGE FROM 1950[a]

Line no.	College graduates	1950	1952	1954	1956	1958	1960	1962	1964	1966	1968 est.
	1	2	3	4	5	6	7	8	9	10	11
1	Total receiving bachelor's degree[b]..................	432,058	329,986	290,825	308,812	362,554	392,440	417,846	498,654	536,000[c]	673,000
2	Percent change from 1950 .	...	-23.6%	-32.7%	-28.5%	-16.1%	-9.2%	-3.3%	+15.4%	+24.1%	+55.8%
3	TOTAL PREPARED TO TEACH IN ELEMENTARY SCHOOL, REGULAR INSTRUCTION	28,587	37,649	36,885	40,801	45,318	52,630	57,854	72,581	77,703	89,941
4	Change from 1950	...	+31.7%	+29.0%	+42.7%	+58.5%	+84.1%	+102.4%	+153.9%	+171.8%	+214.6%
	Prepared to teach in high school or specific subjects:										
5	Agriculture	3,294	1,891	1,541	1,549	1,804	1,379	1,032	997	1,787	2,047
6	Change from 1950	...	-42.6%	-53.2%	-53.0%	-45.2%	-58.1%	-68.7%	-69.7%	-45.7%	-37.9%
7	Art	2,225	2,249	1,856	2,072	2,233	2,719	3,031	4,031	4,998	6,675
8	Change from 1950	...	+1.1%	-16.6%	-6.9%	+0.4%	+22.2%	+36.2%	+81.2%	+124.6%	+200.0%
9	Business education	7,235	5,165	4,076	5,494	6,166	7,106	6,752	7,207	7,261	9,001
10	Change from 1950	...	-28.6%	-43.7%	-24.1%	-14.8%	-1.8%	-6.7%	-0.4%	+0.4%	+24.4%
11	English	10,709	8,211	5,278	5,945	7,706	9,295	11,886	16,021	18,410	22,895
12	Change from 1950	...	-23.3%	-50.7%	-44.5%	-28.0%	-13.2%	+11.0%	+49.6%	+71.9%	+113.8%
13	Foreign languages	2,193	1,859	1,368	1,424	1,627	2,178	3,227	5,281	7,162	9,367
14	Change from 1950	...	-15.2%	-37.6%	-35.1%	-25.8%	-0.7%	+47.2%	+140.8%	+226.5%	+327.1%
15	Home economics	4,899	4,648	4,212	4,522	4,575	4,812	4,788	5,281	5,690	6,780
16	Change from 1950	...	-5.1%	-14.0%	-7.7%	-6.6%	-1.8%	-2.3%	+7.8%	+16.1%	+38.4%
17	Industrial arts	4,890	3,161	2,201	2,655	3,791	3,785	3,325	3,435	3,432	4,338
18	Change from 1950	...	-35.4%	-55.0%	-45.7%	-22.5%	-22.6%	-22.0%	-29.8%	-29.8%	-11.3%
19	Mathematics	4,618	3,142	2,223	2,544	3,445	5,652	6,839	8,026	9,193	10,349
20	Change from 1950	...	-32.0%	-51.9%	-44.9%	-25.4%	+22.4%	+48.1%	+73.8%	+99.1%	+124.1%
21	Music	5,296	4,882	4,323	4,798	5,189	5,200	5,302	5,978	6,311	7,475
22	Change from 1950	...	-7.8%	-18.4%	-9.4%	-2.0%	-1.8%	+0.1%	+12.9%	+19.2%	+41.1%
23	Men's physical education .	10,614	6,546	4,834	5,718	7,430	7,332	6,997	7,181	8,552[d]	9,114[d]
24	Change from 1950	...	-38.3%	-54.5%	-46.1%	-30.0%	-30.9%	-34.1%	-32.3%	-19.4%	-14.1%
25	Women's physical education	3,178	2,607	2,440	2,629	2,762	3,177	3,414	4,063	4,924[d]	6,026[d]
26	Change from 1950	...	-18.0%	-23.2%	-17.3%	-13.1%	e/	+7.4%	+27.8%	+54.9%	+89.6%
27	Natural and physical sciences	9,096	5,246	3,641	4,320	5,467	7,119	7,808	8,608	10,476	11,366
28	Change from 1950	...	-40.3%	-60.0%	-52.5%	-39.9%	-21.7%	-14.2%	-5.4%	+15.2%	+25.0%
29	Social studies	15,349	9,406	7,227	9,125	11,672	13,197	14,724	18,583	22,381	27,051
30	Change from 1950	...	-38.7%	-52.9%	-40.5%	-24.0%	-14.0%	-4.1%	+21.1%	+45.8%	+76.2%
31	Other fields[f]	3,294	2,497	3,696	3,990	5,226	4,622	5,364	6,860	11,631[g]	14,027
32	Change from 1950	...	-24.4%	+12.2%	+21.1%	+58.7%	+40.3%	+62.8%	+108.3%	+253.1%	+325.8%
33	TOTAL PREPARED TO TEACH HIGH-SCHOOL SUBJECTS	86,890	61,510	48,916	56,785	69,093	77,573	84,489	101,552	122,208	146,511
34	Change from 1950	...	-29.2%	-43.7%	-34.6%	-20.5%	-10.7%	-2.8%	+16.9%	+40.6%	+68.6%
35	Prepared to enter selected positions	...	...	...	...	...	...	...	...	5,007	6,990
36	GRAND TOTAL PREPARED	115,477	99,159	85,801	97,586	114,411	130,203	142,343	174,133	204,918	243,442
37	Change from 1950	...	-14.1%	-25.7%	-15.5%	-0.9%	+12.8%	+23.3%	+50.8%	+77.5%	+110.8%

a/ Excludes students meeting certificate requirements at 90-, 60-, or 30-hour levels. b/ From: U. S. Department of Health, Education, and Welfare, Office of Education. Digest of Educational Statistics, 1966. Washington, D. C.: Government Printing Office, 1966. p. 66. Includes bachelor's and first professional degrees. c/ From: U. S. Department of Health, Education, and Welfare, Office of Education. Projections of Educational Statistics to 1976-77. 1967 edition. Washington, D. C.: Government Printing Office, 1968. p. 31. d/ Numbers of persons for whom sex was not reported are included proportionally. e/ Minus less than 1/10 of 1 percent. f/ Includes persons prepared to teach distributive education, unspecified junior high-school subjects, trade and industrial courses, special education, unspecified elementary-school classes, speech, drama, journalism, library sciences, and subjects not specified. g/ Not directly comparable with earlier years owing to changes in the data-collection instruments.

series, the numbers of persons completing preparation in selected subject fields for assignment in elementary schools or for special education, library science, and guidance have been regrouped with the high-school subjects. The summary shows continuing growth in the numbers of persons being prepared for elementary- and high-school assignments. Using 1950 as a base, the first year for which complete data are available, the percentages show the general pattern of growth in the supply of college graduates prepared to teach in elementary schools and in the high-school subjects. The table shows that the total number of persons receiving a bachelor's or first professional degree was below the 1950 level through 1960, approached the 1950 level in 1961-62, and has exceeded the 1950 level since 1962. A similar general pattern of lower annual new supply during the 1950-1959 period followed by greater supply since 1962 is observed among the number of persons being prepared to teach in high schools. The number being prepared to teach in elementary schools has been consistently greater than the 1950 level with more than twice as many being graduated each year since 1962 than were being prepared in 1950.

Among the high-school subject areas the numbers of new teacher education graduates are expected to exceed 1950 levels in all areas except industrial arts and agriculture. The current status is a marked change from the 1952 through 1958 period in which the number of new high-school teachers being graduated was lower than the 1950 levels in all areas except "other fields."

Table 2 (page 14) should be interpreted with consideration given to the following: (a) The base year, 1950, contained the crest of the wave of returning World War II veterans who completed their college degrees. (b) The supply of new teacher education graduates in 1950 was not in balance with the demand for new teachers. (c) The impact of the increase in demand for public-school teachers for the flood of enlarged public-school enrollments was yet to be felt. It reached the first grade beginning in 1952-53.

While the number of new elementary-school teacher education graduates has consistently exceeded 1950 levels, this new supply has not approached the level of the new supply of high-school teachers. During the years in which the elementary-school staff was increasing by larger numbers than the staff in high schools, the number of prospective elementary-school teachers being graduated ranged from one-half to three-fourths as large as the number of prospective high-school teachers.

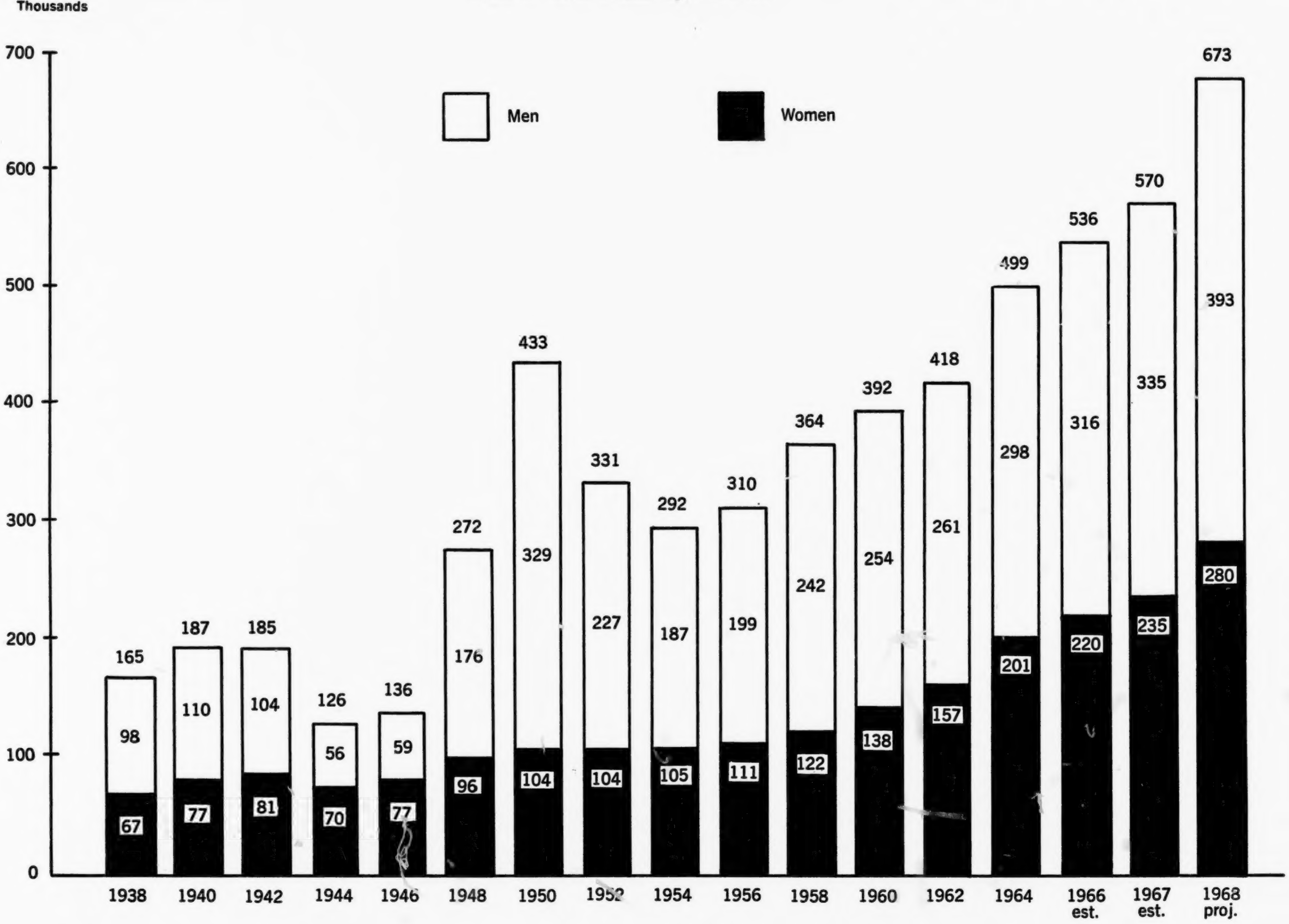
Also shown in Table 1 are the numbers of persons completing teacher education programs in 1968 and 1967 listed separately by sex at each level. While the number of men expected to complete teacher education programs has been increasing since 1954-55, the percentage of teacher education graduates represented by men has been decreasing. Listed in Table 3 are the percentages of teacher education graduates and the percentages of all public-school teachers who are men, biennially since 1951-52. Accompanying the decrease in the proportions of

TABLE 3.--PERCENT OF TEACHER EDUCATION GRADUATES AND PERCENT OF ALL TEACHERS WHO ARE MEN, BIENNIALLY SINCE THE 1951-52 SESSION

Session	Percent who are men					
	Elementary		Secondary		Total	
	Teacher education graduates	All teachers[a]	Teacher education graduates	All teachers[a]	Teacher education graduates	All teachers[a]
1	2	3	4	5	6	7
1951-52	19.4%	12.5%	57.1%	45.9%	44.2%	24.4%
1953-54	15.3	12.2	52.4	46.3	37.2	24.6
1955-56	13.4	12.7	52.7	49.3	36.8	26.0
1957-58	13.5	12.8	55.3	50.4	39.4	26.8
1959-60	12.5	14.1	53.9	52.8	38.3	29.0
1961-62	12.2	14.5	51.6	53.3	36.2	29.9
1963-64	10.1	14.5	44.7	53.9	30.3	31.5
1965-66	11.1	14.5	44.9	53.9	31.6	31.6
1966-67	11.4	14.7	44.0	53.5	30.6	31.6
1967-68	10.8	14.6	42.8	53.7	29.9	31.7

[a] National Education Association, Research Division. Estimates of School Statistics, 1967-68. Research Report 1967-R19. Washington, D. C.: the Association, 1967. p. 14.

FIGURE II
Bachelor's and First Professional Degrees Conferred, 1938 to 1968 Biennially, and 1967



Source:
U.S. Office of Education Reports and *Projections of Educational Statistics to 1976-77.* (1967 Edition). p. 31.

NEA Research Division

teacher education graduates who are men have been increasing proportions of the total numbers of teachers who are men. Since 1961-62 the number of men has represented less than half of the number of persons expected to complete teacher education programs for entry into secondary-school teaching.

New Supply as Percentage of Graduating Class

A broad perspective of the supply of potential teachers may be obtained through a review of the numbers of persons graduating with the bachelor's and first professional degrees. A summary showing the numbers of men and women graduates since 1938 in two-year intervals is given in Figure II. Since 1963 the number of graduates has exceeded the 1950 level, the peak of the increase in college graduates following World War II. A major increase of 18 percent over the previous year is projected for 1968.

The percentages of graduates receiving the bachelor's or first professional degree represented by persons completing teacher education programs suggest that teacher preparation attracted an increasing proportion of persons enrolled in higher education until 1966 but the trend may have leveled since 1966. These classifications are not entirely comparable because the number of teacher education graduates includes persons completing the master's degree. Summarized below are the percentages of the total number of baccalaureate and first professional degree graduates represented by the graduates who have completed teacher education programs, biennially since 1950.

	Teacher education graduates as percent of total bachelor's and first professional degree class		
Year	Elementary school	Secondary school	Total
1950	6.6%	20.1%	26.7%
1952	11.4	18.6	30.0
1954	12.6	16.8	29.4
1956	13.2	18.3	31.5
1958	12.5	19.0	31.5
1960	13.4	19.8	33.2
1962	13.8	20.2	34.1
1964	14.5	20.4	34.9
1965	14.8	21.4	36.2
1966*	14.5	22.8	37.3
1967*a/	13.4	21.3	34.8
1968 est.*a/ ...	13.4	21.8	35.1

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*Persons completing preparation to teach specific subjects are grouped within high-school category as in earlier studies of this series. Total does not include the graduates prepared to enter supporting ungraded positions.

a/ A few institutions in two states did not respond in 1968.

Supply of Prospective Beginning Teachers by State

Tables 1 and 2 summarize the new supply of prospective teachers by assignment level, sex, degree, and secondary-school subject. The conditions in each state are summarized in Tables 4, 5, and 6, showing the number of prospective teachers completing their preparation in 1967 and 1968, grouped by sex, degree, and the instructional level for which they have been prepared. (Complete summaries of information reported by states are given in Table A in the Appendix.) As may be expected from differences in population, there are wide differences among the states in the numbers of persons being prepared for teaching.

Table 4 shows that changes in the total numbers prepared to teach in 1968 range from a reduction of 242 in Idaho to an increase of 11,699 in New York. (This estimate of a large increase should be interpreted only in general terms because a similar increase estimated for 1967 last year did not materialize.)

The number of teacher education graduates by degree level was requested for the second time in the present study. Comparison among the states in the numbers completing preparation at either academic level, therefore, should be interpreted with caution because the states differ in the availability of this information.

Table 5 shows that at the elementary-school level the change in the number of persons completing preparation with a bachelor's degree is within the range of plus or minus 250 in all but 10 states. Increases of more than 500 bachelor's degree graduates are estimated in Iowa, Massachusetts, New York, and Pennsylvania. With the exception of New York and California, changes in the numbers completing their preparation with a master's degree are within plus or minus 200.

At the secondary-school level (Table 6) the changes in the numbers of persons completing preparation with a bachelor's degree range from a decrease of 92 to an increase of 2,337. Increases of more than 500 are reported by Alabama, Florida, Georgia, Iowa, Massachusetts, Michigan, Missouri, New Jersey, New York, Ohio, Pennsylvania, Texas, and Wisconsin. Changes in the number of prospective secondary-school teachers receiving the master's degree range from a decrease of 96 (in Florida) to an increase of 3,994 (in New York).

Table 13 shows that 48.7 percent of the new teachers were assigned to elementary-school classrooms, as reported by 28 states and the District of Columbia for 1967-68. On the assumption that this distribution of new teachers is representative of the national pattern, six states--Alabama, Arkansas, Maine, Mississippi, North Dakota, Tennessee, West Virginia,

TABLE 4. -- COLLEGE STUDENTS RECEIVING DEGREES AND PREPARATION TO TEACH IN ELEMENTARY AND SECONDARY SCHOOLS, 1968 AND 1967, BY STATE

STATE 1	BACHELOR'S AND MASTER'S COMBINED TOTAL, 1968 2	TOTAL, 1967 3	NET CHANGE 4	PERCENT CHANGE 5
ALABAMA	4,204	3,481	+ 723	+20.8
ALASKA	65	54	+ 11	+20.4
ARIZONA	2,936	2,737	+ 199	+ 7.3
ARKANSAS	3,042	2,407	+ 635	+26.4
CALIFORNIA[a/]	10,387	8,477	+ 1,910	+22.5
COLORADO	3,198	3,231	- 33	- 1.0
CONNECTICUT	2,909	2,592	+ 317	+12.2
DELAWARE	386	355	+ 31	+ 8.7
DISTRICT OF COLUMBIA	286	459	- 173	-37.7
FLORIDA	5,477	4,815	+ 662	+13.7
GEORGIA	3,938	3,088	+ 850	+27.5
HAWAII	672	705	- 33	- 4.7
IDAHO	745	987	- 242	-24.5
ILLINOIS[a/]	6,694	5,867	+ 827	+14.1
INDIANA	6,004	5,868	+ 136	+ 2.3
IOWA	4,457	3,180	+ 1,277	+40.2
KANSAS	3,955	3,403	+ 552	+16.2
KENTUCKY	4,959	4,303	+ 656	+15.2
LOUISIANA	3,986	3,343	+ 643	+19.2
MAINE	1,099	1,061	+ 38	+ 3.6
MARYLAND	2,568	2,343	+ 225	+ 9.6
MASSACHUSETTS[a/]	5,257	3,896	+ 1,361	+34.9
MICHIGAN	11,415	10,384	+ 1,031	+ 9.9
MINNESOTA	6,131	5,389	+ 742	+13.8
MISSISSIPPI	3,829	3,349	+ 480	+14.3
MISSOURI	5,537	4,308	+ 1,229	+28.5
MONTANA	1,436	1,358	+ 78	+ 5.7
NEBRASKA	3,508	2,976	+ 532	+17.9
NEVADA	262	241	+ 21	+ 8.7
NEW HAMPSHIRE	915	702	+ 213	+30.3
NEW JERSEY	6,657	5,280	+ 1,377	+26.1
NEW MEXICO	1,109	1,052	+ 57	+ 5.4
NEW YORK[a/]	27,961	16,262	+11,699	+71.9
NORTH CAROLINA	6,281	5,605	+ 676	+12.1
NORTH DAKOTA	1,660	1,278	+ 382	+29.9
OHIO	11,377	10,683	+ 694	+ 6.5
OKLAHOMA	4,849	4,849	...	...
OREGON	2,555	2,663	- 108	- 4.1
PENNSYLVANIA	13,527	11,938	+ 1,589	+13.3
RHODE ISLAND	1,481	1,171	+ 310	+26.5
SOUTH CAROLINA	2,219	1,797	+ 422	+23.5
SOUTH DAKOTA	1,849	1,707	+ 142	+ 8.3
TENNESSEE	5,121	4,512	+ 609	+13.5
TEXAS	11,941	10,936	+ 1,005	+ 9.2
UTAH	2,550	2,431	+ 119	+ 4.9
VERMONT	585	473	+ 112	+23.7
VIRGINIA	3,401	3,051	+ 350	+11.5
WASHINGTON	4,324	3,657	+ 667	+18.2
WEST VIRGINIA	2,769	2,147	+ 622	+29.0
WISCONSIN	5,951	5,028	+ 923	+18.4
WYOMING	426	327	+ 99	+30.3
TOTAL	228,850	192,206	+36,644	+19.1

[a/] Number of 1967 graduates estimated in 1967 in California was 11,599; in Illinois, 10,600; in Massachusetts, 7,116; and in New York, 24,613.

and Wyoming--show a decided imbalance: The number of prospective secondary-school teachers being graduated is twice as large as the number of potential elementary-school teachers.

The states differ in rate of population growth, proportion of school-age population enrolled in public schools, growth in school enrollments, current status of teacher supply, conditions influencing the morale of teachers, and population mobility. These differences, along with the differences in the resident population represented in higher education enrollments, reduce the validity of judgments about the adequacy of the supply of beginning teachers among the states drawn from information in Tables 5 and 6.

TABLE 5. -- COLLEGE STUDENTS RECEIVING DEGREES AND PREPARATION TO TEACH IN THE ELEMENTARY SCHOOL, 1968 AND 1967, BY STATE

STATE	BACHELOR'S DEGREE: GRADUATES OF 1968 MEN	GRADUATES OF 1968 WOMEN	GRADUATES OF 1968 TOTAL	TOTAL, 1967	1967 TO 1968 NET CHANGE	1967 TO 1968 PERCENT CHANGE	MASTER'S DEGREE: GRADUATES OF 1968 MEN	GRADUATES OF 1968 WOMEN	GRADUATES OF 1968 TOTAL	TOTAL, 1967	1967 TO 1968 NET CHANGE	1967 TO 1968 PERCENT CHANGE
1	2	3	4	5	6	7	8	9	10	11	12	13
ALABAMA	48	1,162	1,210	1,070	+ 140	+ 13.1	8	93	101	105	- 4	- 3.8
ALASKA	4	23	27	21	+ 6	+ 28.6	...	...	...	...	...	...
ARIZONA	146	790	936	891	+ 45	+ 5.1	107	283	390	444	- 54	- 12.2
ARKANSAS	69	783	852	713	+ 139	+ 19.5	10	72	82	59	+ 23	+ 39.0
CALIFORNIA	245	1,917	2,162	2,142	+ 20	+ .9	369	2,486	2,855	1,742	+ 1,113	+ 63.9
COLORADO	94	899	993	871	+ 122	+ 14.0	19	92	111	135	- 24	- 17.8
CONNECTICUT	137	969	1,106	1,069	+ 37	+ 3.5	110	253	363	209	+ 154	+ 73.7
DELAWARE	18	149	167	142	+ 25	+ 17.6	...	...	...	1	- 1	-100.0
DISTRICT OF COLUMBIA	2	118	120	250	- 130	- 52.0	...	...	...	...	...	...
FLORIDA	236	1,831	2,067	1,712	+ 355	+ 20.7	118	183	301	405	- 104	- 25.7
GEORGIA	60	1,448	1,508	1,169	+ 339	+ 29.0	12	73	85	78	+ 7	+ 9.0
HAWAII	5	226	231	233	- 2	- .9	1	191	192	173	+ 19	+ 11.0
IDAHO	34	226	260	401	- 141	- 35.2	6	1	7	10	- 3	- 30.0
ILLINOIS	320	2,523	2,843	2,470	+ 373	+ 15.1	64	52	116	102	+ 14	+ 13.7
INDIANA	212	1,829	2,041	2,072	- 31	- 1.5	...	9	9	7	+ 2	+ 28.6
IOWA	94	1,620	1,714	1,101	+ 613	+ 55.7	...	...	...	...	...	...
KANSAS	117	1,405	1,522	1,321	+ 201	+ 15.2	...	6	6	3	+ 3	+100.0
KENTUCKY	193	1,606	1,799	1,573	+ 226	+ 14.4	51	126	177	262	- 85	- 32.4
LOUISIANA	142	1,433	1,575	1,404	+ 171	+ 12.2	6	38	44	33	+ 11	+ 33.3
MAINE	52	291	343	318	+ 25	+ 7.9	...	...	...	...	...	...
MARYLAND	102	953	1,055	979	+ 76	+ 7.8	25	72	97	75	+ 22	+ 29.3
MASSACHUSETTS ..	248	1,861	2,109	1,575	+ 534	+ 33.9	94	125	219	211	+ 8	+ 3.8
MICHIGAN	429	3,752	4,181	3,976	+ 205	+ 5.2	93	199	292	296	- 4	- 1.4
MINNESOTA	403	1,945	2,348	2,117	+ 231	+ 10.9	61	32	93	76	+ 17	+ 22.4
MISSISSIPPI	79	1,101	1,180	1,183	- 3	- .3	10	43	53	34	+ 19	+ 55.9
MISSOURI	178	1,747	1,925	1,739	+ 186	+ 10.7	3	20	23	9	+ 14	+155.6
MONTANA	63	525	588	580	+ 8	+ 1.4	...	...	...	15	- 15	-100.0
NEBRASKA	273	1,219	1,492	1,296	+ 196	+ 15.1	5	16	21	19	+ 2	+ 10.5
NEVADA	8	96	104	113	- 9	- 8.0	5	11	16	5	+ 11	+220.0
NEW HAMPSHIRE ..	31	341	372	279	+ 93	+ 33.3	1	5	6	10	- 4	- 40.0
NEW JERSEY	255	2,412	2,667	2,176	+ 491	+ 22.6	20	19	39	47	- 8	- 17.0
NEW MEXICO	30	297	327	312	+ 15	+ 4.8	11	33	44	61	- 17	- 27.9
NEW YORK	818	7,463	8,281	6,713	+ 1,568	+ 23.4	565	4,544	5,109	1,309	+ 3,800	+290.3
NORTH CAROLINA[a]	...	...	1,851	1,643	+ 208	+ 12.7	...	...	287	276	+ 11	+ 4.0
NORTH DAKOTA ...	59	426	485	425	+ 60	+ 14.1	...	...	...	1	- 1	-100.0
OHIO[b]	301	4,315	4,616	4,566	+ 50	+ 1.1	12	24	51	88	- 37	- 42.0
OKLAHOMA	195	1,195	1,390	1,390	...	...	70	241	311	311	...	...
OREGON	97	922	1,019	1,069	- 50	- 4.7	1	5	6	22	- 16	- 72.7
PENNSYLVANIA ...	617	4,521	5,138	4,560	+ 578	+ 12.7	21	55	76	50	+ 26	+ 52.0
RHODE ISLAND ...	65	437	502	433	+ 69	+ 15.9	17	26	43	69	- 26	- 37.7
SOUTH CAROLINA .	26	794	820	646	+ 174	+ 26.9	...	...	...	...	...	...
SOUTH DAKOTA ...	47	591	638	614	+ 24	+ 3.9	1	2	3	6	- 3	- 50.0
TENNESSEE	124	1,397	1,521	1,272	+ 249	+ 19.6	5	16	21	13	+ 8	+ 61.5
TEXAS	494	4,285	4,779	4,464	+ 315	+ 7.1	88	271	359	368	- 9	- 2.4
UTAH	135	877	1,012	970	+ 42	+ 4.3	...	2	2	1	+ 1	+100.0
VERMONT	31	229	260	209	+ 51	+ 24.4	...	2	2	4	- 2	- 50.0
VIRGINIA	65	1,195	1,260	1,077	+ 183	+ 17.0	1	45	46	34	+ 12	+ 35.3
WASHINGTON	222	1,747	1,969	1,512	+ 457	+ 30.2	...	...	...	...	...	...
WEST VIRGINIA ..	68	668	736	583	+ 153	+ 26.2	...	...	...	...	...	...
WISCONSIN[c]	214	1,522	2,177	1,981	+ 196	+ 9.9	50	93	143	106	+ 37	+ 34.9
WYOMING	11	118	129	124	+ 5	+ 4.0	...	...	...	...	...	...
TOTAL	7,916	70,199	80,407	71,519	+ 8,888	+ 12.4	2,040	9,859	12,201	7,284	+ 4,917	+ 67.5

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a/ All institutions did not report bachelor's and master's degrees data by sex for 1968 and master's degree data by sex for 1967.

b/ Some institutions did not report master's degree data by sex for 1968.

c/ Some institutions did not report bachelor's degree data by sex for 1968.

TABLE 6. -- COLLEGE STUDENTS RECEIVING DEGREES AND PREPARATION TO TEACH IN THE SECONDARY SCHOOL, 1968 AND 1967, BY STATE

STATE	BACHELOR'S DEGREE						MASTER'S DEGREE					
	GRADUATES OF 1968			TOTAL,	1967 TO 1968		GRADUATES OF 1968			TOTAL,	1967 TO 1968	
	MEN	WOMEN	TOTAL	1967	NET CHANGE	PERCENT CHANGE	MEN	WOMEN	TOTAL	1967	NET CHANGE	PERCENT CHANGE
1	2	3	4	5	6	7	8	9	10	11	12	13
ALABAMA	1,047	1,675	2,722	2,134	+ 588	+ 27.6	97	74	171	172	- 1	- .6
ALASKA	15	23	38	33	+ 5	+ 15.2	...	...	...	...	...	...
ARIZONA	527	629	1,156	971	+ 185	+ 19.1	284	170	454	431	+ 23	+ 5.3
ARKANSAS	836	1,126	1,962	1,534	+ 428	+ 27.9	84	62	146	101	+ 45	+ 44.6
CALIFORNIA	485	709	1,194	910	+ 284	+ 31.2	1,862	2,314	4,176	3,683	+ 493	+ 13.4
COLORADO	854	852	1,706	1,802	- 96	- 5.3	248	140	388	423	- 35	- 8.3
CONNECTICUT	387	701	1,088	1,042	+ 46	+ 4.4	199	153	352	272	+ 80	+ 29.4
DELAWARE	67	152	219	212	+ 7	+ 3.3	...	...	...	...	...	...
DISTRICT OF COLUMBIA	25	124	149	196	- 47	- 24.0	3	14	17	13	+ 4	+ 30.8
FLORIDA	1,237	1,684	2,921	2,414	+ 507	+ 21.0	105	83	188	284	- 96	- 33.8
GEORGIA	679	1,517	2,196	1,681	+ 515	+ 30.6	72	77	149	160	- 11	- 6.9
HAWAII	43	113	156	173	- 17	- 9.8	12	81	93	126	- 33	- 26.2
IDAHO	228	221	449	541	- 92	- 17.0	22	7	29	35	- 6	- 17.1
ILLINOIS	1,587	2,041	3,628	3,160	+ 468	+ 14.8	64	43	107	135	- 28	- 20.7
INDIANA	1,861	2,014	3,875	3,708	+ 167	+ 4.5	42	37	79	81	- 2	- 2.5
IOWA	1,288	1,455	2,743	2,079	+ 664	+ 31.9	...	...	...	...	...	...
KANSAS	1,142	1,263	2,405	2,056	+ 349	+ 17.0	17	5	22	23	- 1	- 4.3
KENTUCKY	1,383	1,449	2,832	2,409	+ 423	+ 17.6	103	48	151	59	+ 92	+155.9
LOUISIANA	844	1,426	2,270	1,833	+ 437	+ 23.8	53	44	97	73	+ 24	+ 32.9
MAINE	393	363	756	743	+ 13	+ 1.7	...	...	...	...	...	...
MARYLAND	475	794	1,269	1,181	+ 88	+ 7.5	79	68	147	108	+ 39	+ 36.1
MASSACHUSETTS	1,107	1,450	2,557	1,751	+ 806	+ 46.0	168	204	372	359	+ 13	+ 3.6
MICHIGAN	2,935	3,494	6,429	5,588	+ 841	+ 15.1	312	201	513	524	- 11	- 2.1
MINNESOTA	1,709	1,736	3,445	2,948	+ 497	+ 16.9	172	73	245	248	- 3	- 1.2
MISSISSIPPI	1,149	1,339	2,488	2,083	+ 405	+ 19.4	43	65	108	49	+ 59	+120.4
MISSOURI	1,613	1,929	3,542	2,535	+ 1,007	+ 39.7	11	36	47	25	+ 22	+ 88.0
MONTANA	483	365	848	755	+ 93	+ 12.3	...	...	...	8	- 8	-100.0
NEBRASKA	1,049	839	1,888	1,555	+ 333	+ 21.4	80	27	107	106	+ 1	+ .9
NEVADA	72	63	135	117	+ 18	+ 15.4	4	3	7	6	+ 1	+ 16.7
NEW HAMPSHIRE	269	249	518	397	+ 121	+ 30.5	8	11	19	16	+ 3	+ 18.8
NEW JERSEY	1,482	2,165	3,647	2,681	+ 966	+ 36.0	175	129	304	376	- 72	- 19.1
NEW MEXICO	348	307	655	549	+ 106	+ 19.3	51	32	83	130	- 47	- 36.2
NEW YORK	3,338	4,986	8,324	5,987	+ 2,337	+ 39.0	2,514	3,733	6,247	2,253	+ 3,994	+177.3
NORTH CAROLINA	...	...	3,536	3,082	+ 454	+ 14.7	...	...	607	604	+ 3	+ .5
NORTH DAKOTA	662	513	1,175	845	+ 330	+ 39.1	...	...	...	7	- 7	-100.0
OHIO	2,862	3,654	6,516	5,772	+ 744	+ 12.9	99	95	194	257	- 63	- 24.5
OKLAHOMA	1,285	1,350	2,635	2,635	...	...	320	193	513	513	...	...
OREGON	555	802	1,357	1,420	- 63	- 4.4	104	69	173	152	+ 21	+ 13.8
PENNSYLVANIA	3,819	4,348	8,167	7,210	+ 957	+ 13.3	83	63	146	118	+ 28	+ 23.7
RHODE ISLAND	451	348	799	520	+ 279	+ 53.7	69	68	137	149	- 12	- 8.1
SOUTH CAROLINA	424	952	1,376	1,129	+ 247	+ 21.9	8	15	23	22	+ 1	+ 4.5
SOUTH DAKOTA	624	549	1,173	1,053	+ 120	+ 11.4	27	8	35	34	+ 1	+ 2.9
TENNESSEE	1,349	1,900	3,249	2,980	+ 269	+ 9.0	105	225	330	247	+ 83	+ 33.6
TEXAS	2,233	3,921	6,154	5,505	+ 649	+ 11.8	265	384	649	599	+ 50	+ 8.3
UTAH	759	757	1,516	1,444	+ 72	+ 5.0	14	6	20	16	+ 4	+ 25.0
VERMONT	142	162	304	253	+ 51	+ 20.2	9	10	19	7	+ 12	+171.4
VIRGINIA	559	1,486	2,045	1,910	+ 135	+ 7.1	19	31	50	30	+ 20	+ 66.7
WASHINGTON	1,007	1,348	2,355	2,145	+ 210	+ 9.8	...	...	...	...	...	...
WEST VIRGINIA	958	1,075	2,033	1,564	+ 469	+ 30.0	...	...	...	...	...	...
WISCONSIN	1,271	1,370	3,203	2,635	+ 568	+ 21.6	272	156	428	306	+ 122	+ 39.9
WYOMING	150	147	297	203	+ 94	+ 46.3	...	...	...	...	...	...
TOTAL	50,067	63,935	118,100	100,063	+18,037	+ 18.0	8,278	9,257	18,142	13,340	+ 4,802	+ 36.0

Occupation of Teacher Education Graduates in 1967

Typically many persons completing teacher education programs do not enter teaching during the subsequent year, even in a time of shortage. A sizable number may be expected either to enter other occupations permanently or to defer their entry into teaching.

Follow-up information about teacher education graduates, gathered by a large proportion of the institutions of higher education, has been part of the annual survey of public-school teacher supply and demand for several years. This year 43 states and the District of Columbia forwarded follow-up information to the NEA Research Division. Information is not available from Alaska, California, Kentucky, Nevada, Oklahoma, Tennessee, and Vermont. Information for less than 85 percent of the teacher education graduates of 1967 is available for the District of Columbia, Arizona, Mississippi (elementary), Missouri (elementary), New Jersey (secondary), New Mexico, North Carolina (secondary), Ohio (secondary), and Rhode

Island. As a whole, follow-up information has been reported this year for 85.1 percent of the prospective elementary-school teachers and for 83.4 percent of the prospective secondary-school teachers who were graduated in 1967.

The occupational status of the teacher education graduates of 1967 is shown in Table 7. Information in column 11 shows that the status of 15.5 percent of the teacher education graduates is not known by these reporting institutions. This condition suggests that the percentage entries in at least one of the other columns are slightly lower than would be observed if follow-up information were available for all graduates.

Percent Entering Teaching by November 1967

Table 7 shows that not all of the teacher education graduates become teachers immediately following completion of their training. The figures below indicate the extent to which the prospective teachers for whom follow-up information is available have actually entered teaching positions each year since 1955:

Year	Percent of eligible graduates having follow-up information reported	Among eligible graduates in institutions reporting follow-up status			
		Percent who entered teaching in			Percent whose employment status is not known
		Elementary school	Secondary school	Total	
1953	24.9%	77.1%	53.3%	64.4%	23.2%
1954	47.9	78.9	55.7	65.8	12.0
1955	66.8	81.6	62.9	71.3	8.0
1956	71.9	80.8	63.2	70.7	8.9
1957	78.8	82.9	65.5	72.7	7.7
1958	78.1	83.3	67.8	73.7	7.3
1959	72.9	82.3	66.4	72.5	10.1
1960	78.8	82.2	68.1	73.6	9.5
1961	88.3	83.2	68.4	74.3	9.1
1962	87.9	82.3	69.2	74.4	9.4
1963	86.5	82.0	67.9	73.8	10.7
1964	79.4	81.2	67.0	72.7	11.6
1965	93.6	81.2	66.0	72.2	11.5
1966	84.5	80.8	66.6	72.1*	12.7
1967	84.1	78.0	64.3	70.0*	15.5

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*Special education positions included in total.

This review shows that over the past decade less than three-fourths of the prospective teachers have entered immediate employment as teachers. In broad terms, 4 persons in 5 prepared for elementary-school teaching and about 2 persons in 3 prepared for high-school teaching actually accepted teaching positions near the beginning of the school year which followed their graduation.

The proportion of potential teachers who entered teaching increased with the increase in demand between 1955 and 1962. Other indications of trends in the entry rates may not be valid in view of the variations in the proportion of all eligible graduates having follow-up information reported and in the percents of eligible graduates whose employment status is not known. The data in this summary suggest that the most recent proportions may provide a conservative minimum estimate of the net or effective supply of beginning teachers available for employment in 1968-69.

Subject Differences

The percentages of prospective teachers who enter teaching immediately following graduation range from 44.2 percent in the trade, industrial, vocational, and technical grouping to 80.7 percent in the junior high-school subjects. The ranked percentages by subject field of the graduates who entered teaching by November 1, 1967, and are as follows:

Field of preparation	Percent entering teaching
Junior high-school subjects	80.7%
Elementary school--regular instruction	78.1
Elementary-school--total	78.0
Music in elementary school	76.0
Foreign language in elementary school	75.6
Women's physical and health education	74.2
Special education	71.9
Industrial arts	70.3
Physical and health education in elementary school	69.8
Mathematics	69.1
Art in elementary school	67.5
English	66.3
Art	66.2
General natural and physical sciences	65.0
Foreign languages	64.7
Secondary school (all fields combined)	64.3
Biology	64.3
Business education	63.5
Men's physical and health education .	63.5
Home economics	63.4
Journalism	61.3
Chemistry	60.6
Social studies	59.0
Physics	58.8
Speech and drama	57.5
Agriculture	57.2
Library science	56.5
Guidance counselors	53.6
Distributive education	51.6
Trade, industrial, vocational, technical	44.2

TABLE 7.--OCCUPATION ON NOVEMBER 1, 1967, OF PERSONS WHO WERE GRADUATED BETWEEN SEPTEMBER 1, 1966, AND AUGUST 31, 1967, WITH QUALIFICATIONS FOR STANDARD TEACHING CERTIFICATES

FIELD OF PREPARATION		PERCENT TEACHING			PERCENT NOT TEACHING								
		IN STATE	OUT OF STATE	TOTAL	OTHERWISE GAINFULLY EMPLOYED	CONTINUING FORMAL STUDY	MILITARY SERVICE	HOME MAKING	SEEKING TEACHING JOB	SEEKING NON TEACHING JOB	NO INFORMATION	TOTAL PERCENT	NUMBER OF GRADUATES
1		2	3	4	5	6	7	8	9	10	11	12	13
ELEMENTARY-SCHOOL TOTAL . .	MEN	57.4	15.0	72.3	3.1	4.4	2.8	.0	.7	.1	16.6	100.0	7,348
	WOMEN	62.4	16.3	78.7	1.8	2.3	.1	3.2	.8	.1	13.1	100.0	59,707
	BOTH	61.8	16.1	78.0	1.9	2.6	.4	2.8	.8	.1	13.5	100.0	67,055
REGULAR INSTRUCTION . . .	MEN	57.2	15.5	72.6	3.0	4.4	2.6	.0	.7	.1	16.6	100.0	6,833
	WOMEN	62.4	16.3	78.8	1.8	2.3	.1	3.2	.8	.1	13.0	100.0	58,444
	BOTH	61.9	16.2	78.1	1.9	2.5	.4	2.8	.8	.1	13.4	100.0	65,277
ART	MEN	38.6	13.6	52.3	10.2	8.0	8.0	.0	3.4	.0	18.2	100.0	88
	WOMEN	56.9	13.7	70.6	2.5	5.3	.0	6.0	.2	.0	15.3	100.0	432
	BOTH	53.8	13.7	67.5	3.8	5.8	1.3	5.0	.8	.0	15.8	100.0	520
FOREIGN LANGUAGE	MEN	62.5	.0	62.5	25.0	.0	12.5	.0	.0	.0	.0	100.0	8
	WOMEN	60.5	16.0	76.5	.8	6.7	1.7	5.9	.0	.0	8.4	100.0	119
	BOTH	60.6	15.0	75.6	2.4	6.3	2.4	5.5	.0	.0	7.9	100.0	127
MUSIC	MEN	65.6	6.6	72.1	2.7	6.0	2.7	.0	.0	.0	16.4	100.0	183
	WOMEN	64.3	13.2	77.6	3.2	3.0	.0	3.0	.6	.0	12.6	100.0	468
	BOTH	64.7	11.4	76.0	3.1	3.8	.8	2.2	.5	.0	13.7	100.0	651
PHY. AND HEALTH EDUC. . .	MEN	63.1	8.5	71.6	4.7	.0	5.5	.0	.0	.0	18.2	100.0	236
	WOMEN	54.1	13.9	68.0	2.5	2.5	.0	1.6	.0	.0	25.4	100.0	244
	BOTH	58.5	11.3	69.8	3.5	1.3	2.7	.8	.0	.0	21.9	100.0	480
SECONDARY SCHOOL													
AGRICULTURE	MEN	53.0	5.4	58.4	11.8	10.1	4.9	.0	.1	.0	14.8	100.0	987
	WOMEN	.0	.0	.0	20.0	.0	.0	.0	.0	.0	80.0	100.0	20
	BOTH	51.9	5.3	57.2	11.9	9.9	4.8	.0	.1	.0	16.1	100.0	1,007
ART	MEN	51.3	13.8	65.1	4.3	9.3	3.9	.0	1.0	.3	16.2	100.0	1,082
	WOMEN	49.9	16.7	66.7	4.2	4.6	.0	4.2	1.9	.1	18.2	100.0	2,807
	BOTH	50.3	15.9	66.2	4.2	5.9	1.1	3.0	1.7	.2	17.7	100.0	3,889
BUSINESS EDUCATION . . .	MEN	49.9	12.1	62.0	11.6	5.7	4.4	.0	.7	.3	15.4	100.0	1,799
	WOMEN	51.6	12.6	64.2	10.9	3.0	.1	4.9	1.4	.5	14.9	100.0	4,322
	BOTH	51.1	12.4	63.5	11.1	3.8	1.3	3.4	1.2	.5	15.1	100.0	6,121
DISTRIBUTIVE EDUCATION .	MEN	37.6	10.1	47.6	16.9	5.8	5.8	.0	.5	.0	23.3	100.0	189
	WOMEN	54.4	10.5	64.9	7.0	8.8	.0	.0	.0	.0	19.3	100.0	57
	BOTH	41.5	10.2	51.6	14.6	6.5	4.5	.0	.4	.0	22.4	100.0	246
ENGLISH . . . . , ...	MEN	51.2	13.9	65.1	4.1	9.5	3.5	.0	.5	1.6	15.8	100.0	3,688
	WOMEN	51.1	15.6	66.6	4.3	6.8	.1	4.1	1.3	.4	16.3	100.0	13,190
	BOTH	51.1	15.2	66.3	4.3	7.4	.9	3.2	1.1	.7	16.2	100.0	16,878
JOURNALISM	MEN	54.8	12.9	67.7	6.5	6.5	3.2	.0	.0	.0	16.1	100.0	31
	WOMEN	51.9	7.8	59.7	15.5	1.6	.0	2.3	.0	.0	20.9	100.0	129
	BOTH	52.5	8.8	61.3	13.8	2.5	.6	1.9	.0	.0	20.0	100.0	160
SPEECH AND DRAMATIC ARTS	MEN	40.5	14.1	54.7	5.9	14.1	4.7	.0	2.2	.2	18.3	100.0	644
	WOMEN	43.9	14.7	58.6	6.3	10.8	.1	4.3	1.4	.1	18.5	100.0	1,632
	BOTH	42.9	14.5	57.5	6.2	11.7	1.4	3.1	1.6	.1	18.5	100.0	2,276
FOREIGN LANGUAGF	MEN	47.4	14.8	62.2	3.9	13.0	4.3	.0	1.7	.2	14.8	100.0	1,267
	WOMEN	49.2	16.2	65.3	3.9	9.5	.2	3.9	1.9	.3	15.0	100.0	5,070
	BOTH	48.8	15.9	64.7	3.9	10.2	1.0	3.1	1.9	.3	14.9	100.0	6,337
HOME ECONOMICS	MEN	66.7	33.3	100.0	.0	.0	.0	.0	.0	.0	.0	100.0	3
	WOMEN	49.2	14.1	63.3	9.3	4.7	.1	6.7	1.3	.3	14.3	100.0	4,992
	BOTH	49.2	14.1	63.4	9.3	4.7	.1	6.7	1.3	.3	14.3	100.0	4,995
INDUSTRIAL ARTS	MEN	55.3	15.4	70.7	6.9	7.5	4.6	.0	.3	.1	9.8	100.0	2,968
	WOMEN	8.3	4.2	12.5	16.7	.0	.0	.0	.0	.0	70.8	100.0	24
	BOTH	54.9	15.3	70.3	7.0	7.4	4.6	.0	.3	.1	10.3	100.0	2,992
JUNIOR H. S. SUBJECTS . .	MEN	72.2	9.7	81.9	4.1	5.6	1.9	.0	.0	.0	6.6	100.0	320
	WOMEN	68.6	11.2	79.8	3.5	1.1	.8	2.7	.0	.3	12.0	100.0	376
	BOTH	70.3	10.5	80.7	3.7	3.2	1.3	1.4	.0	.1	9.5	100.0	696

1		2	3	4	5	6	7	8	9	10	11	12	13
MATHEMATICS	MEN	54.4	12.4	66.9	7.2	9.3	4.0	.0	.3	.4	11.9	100.0	4,013
	WOMEN	57.4	14.2	71.6	7.0	6.4	.1	3.0	.4	.3	11.2	100.0	3,747
	BOTH	55.9	13.3	69.1	7.1	7.9	2.1	1.4	.4	.4	11.5	100.0	7,760
MUSIC	MEN	50.8	12.9	63.7	2.3	15.1	3.3	.0	.6	.1	14.8	100.0	2,096
	WOMEN	53.6	17.1	70.7	2.7	6.9	.1	3.7	.9	.0	14.9	100.0	2,479
	BOTH	52.3	15.2	67.5	2.5	10.7	1.6	2.0	.8	.1	14.9	100.0	4,575
PHYSICAL AND HEALTH EDUC.	MEN	47.3	16.2	63.5	5.2	9.2	5.4	.0	.5	.1	16.2	100.0	6,180
	WOMEN	55.2	19.0	74.2	3.0	4.4	.3	2.7	.8	.1	14.7	100.0	3,938
	BOTH	50.4	17.3	67.6	4.3	7.3	3.4	1.0	.6	.1	15.6	100.0	10,118
NAT. AND PHYS. SCIENCES (NOT SPECIFIED)	MEN	51.3	10.4	61.7	5.0	7.8	4.3	.0	.1	.1	20.9	100.0	694
	WOMEN	42.1	13.5	55.7	4.4	3.7	.0	2.0	.2	.2	33.7	100.0	406
	BOTH	47.9	11.5	59.5	4.8	6.3	2.7	.7	.2	.2	25.6	100.0	1,100
GENERAL NAT. AND PHYS. SCIENCES	MEN	51.6	13.7	65.3	4.0	7.4	4.4	.0	.5	.7	17.7	100.0	801
	WOMEN	48.4	15.9	64.3	5.7	7.0	.0	4.3	.3	.3	18.1	100.0	370
	BOTH	50.6	14.4	65.0	4.5	7.3	3.0	1.4	.4	.6	17.8	100.0	1,171
BIOLOGY	MEN	50.7	14.5	65.2	4.7	11.6	4.6	.0	.5	.3	13.0	100.0	2,623
	WOMEN	47.1	15.8	63.0	6.6	8.9	.1	3.6	1.0	.3	16.6	100.0	1,855
	BOTH	49.2	15.1	64.3	5.5	10.5	2.7	1.5	.7	.3	14.5	100.0	4,478
CHEMISTRY	MEN	51.9	12.4	64.4	7.7	10.1	3.2	.0	.2	.0	14.4	100.0	651
	WOMEN	42.4	11.3	53.7	11.0	11.9	.0	2.8	.8	.6	19.2	100.0	354
	BOTH	48.6	12.0	60.6	8.9	10.7	2.1	1.0	.4	.2	16.1	100.0	1,005
PHYSICS	MEN	51.4	8.8	60.2	7.5	11.9	5.1	.0	.7	.3	14.3	100.0	294
	WOMEN	42.9	10.4	53.2	6.5	13.0	.0	3.9	2.6	.0	20.8	100.0	77
	BOTH	49.6	9.2	58.8	7.3	12.1	4.0	.8	1.1	.3	15.6	100.0	371
SOCIAL STUDIES	MEN	47.1	12.8	59.8	5.9	9.9	6.0	.0	1.1	.4	17.0	100.0	10,494
	WOMEN	44.5	13.3	57.8	7.0	6.9	.2	5.2	1.9	.4	20.6	100.0	7,051
	BOTH	46.0	13.0	59.0	6.3	8.7	3.6	2.1	1.4	.4	18.4	100.0	17,545
TRADE, INDUST., VOC., TECH., ...	MEN	34.1	10.1	44.2	20.3	5.1	4.1	.0	.0	.5	25.8	100.0	217
	WOMEN	11.1	33.3	44.4	22.2	.0	.0	.0	.0	.0	33.3	100.0	9
	BOTH	33.2	11.1	44.2	20.4	4.9	4.0	.0	.0	.4	26.1	100.0	226
OTHER SEC. SCHOOL SUBJECTS	MEN	33.2	10.3	43.5	4.0	17.0	8.8	.0	2.7	1.1	23.1	100.0	377
	WOMEN	36.4	8.9	45.3	10.7	9.8	.0	3.6	.9	.0	29.8	100.0	225
	BOTH	34.4	9.8	44.2	6.5	14.3	5.5	1.3	2.0	.7	25.6	100.0	602
SECONDARY TOTAL	MEN	49.7	13.4	63.1	5.9	9.8	4.8	.0	.7	.4	15.3	100.0	41,418
	WOMEN	50.2	15.1	65.3	5.9	6.4	.1	4.3	1.3	.3	16.3	100.0	53,130
	BOTH	50.0	14.4	64.3	5.9	7.9	2.2	2.4	1.1	.3	15.9	100.0	94,548
UNGRADED													
SPECIAL EDUCATION	MEN	54.7	11.0	65.7	1.1	7.1	1.3	.0	.1	.0	24.6	100.0	700
	WOMEN	58.1	15.0	73.1	1.3	6.8	.1	2.3	.3	.1	16.0	100.0	3,373
	BOTH	57.5	14.3	71.9	1.3	6.9	.3	1.9	.3	.0	17.5	100.0	4,073
LIBRARIAN	MEN	30.2	8.9	39.1	12.3	3.4	.6	.0	1.1	.0	43.6	100.0	179
	WOMEN	48.7	10.6	59.3	7.9	4.7	.0	1.7	.5	.2	25.7	100.0	1,111
	BOTH	46.1	10.4	56.5	8.5	4.5	.1	1.5	.5	.2	28.2	100.0	1,290
GUIDANCE COUNSELOR . . .	MEN	44.0	9.7	53.8	2.1	2.6	.3	.0	.2	.0	41.0	100.0	1,213
	WOMEN	45.2	8.3	53.5	1.8	1.7	.0	1.2	.3	.2	41.2	100.0	978
	BOTH	44.5	9.1	53.6	2.0	2.2	.2	.5	.3	.1	41.1	100.0	2,191
SCHOOL PSYCHOLOGIST . . .	MEN	58.2	5.7	63.9	6.6	4.9	1.6	.0	.0	.0	23.0	100.0	122
	WOMEN	47.9	4.2	52.1	16.7	4.2	.0	1.0	2.1	2.1	21.9	100.0	96
	BOTH	53.7	5.0	58.7	11.0	4.6	.9	.5	.9	.9	22.5	100.0	218
SCHOOL SOCIAL WORKER . .	MEN	50.0	50.0	100.0	.0	.0	.0	.0	.0	.0	.0	100.0	2
	WOMEN	46.7	6.7	53.3	13.3	6.7	.0	13.3	.0	13.3	.0	100.0	15
	BOTH	47.1	11.8	58.8	11.8	5.9	.0	11.8	.0	11.8	.0	100.0	17
SCHOOL NURSE	MEN	85.0	5.0	90.0	.0	5.0	.0	.0	.0	.0	5.0	100.0	20
	WOMEN	44.5	1.5	46.0	24.7	.8	1.9	1.1	.8	.0	24.7	100.0	263
	BOTH	47.3	1.8	49.1	23.0	1.1	1.8	1.1	.7	.0	23.3	100.0	283
OTHER UNGRADED	MEN	45.9	6.3	52.2	3.5	11.5	1.9	.0	.2	.6	30.1	100.0	521
	WOMEN	44.3	8.1	52.4	2.6	7.1	.0	3.3	.0	.7	33.9	100.0	700
	BOTH	45.0	7.4	52.3	2.9	9.0	.8	1.9	.1	.7	32.3	100.0	1,221
GRAND TOTAL	MEN	50.7	13.4	64.1	5.4	8.8	4.3	.0	.7	.3	16.5	100.0	51,523
	WOMEN	56.4	15.5	71.9	3.7	4.3	.1	3.6	1.0	.2	15.1	100.0	119,373
	BOTH	54.7	14.9	69.6	4.2	5.7	1.4	2.5	.9	.2	15.5	100.0	170,896

TABLE 8.--PERCENTS OF TEACHER EDUCATION GRADUATES ENTERING CLASSROOMS IMMEDIATELY FOLLOWING GRADUATION, 1954-1967, BY SUBJECT AREAS

Subject or level 1	1954 2	1956 3	1958 4	1960 5	1962 6	1964 7	1966 8	1967 9
Elementary school, regular instruction	78.9%	80.8%	83.3%	82.2%	82.3%	81.2%	80.8%	78.1%
High-school subjects:								
Agriculture	41.0	50.6	47.3	47.5	56.2	52.7	45.5	57.2
Art[a]	62.6	66.5	70.5	70.5	70.1	66.8	67.2	66.4
Business education	58.1	56.2	59.8	60.7	63.3	62.7	65.4	63.5
English	67.9	68.4	73.1	73.5	74.7	70.9	71.8	66.3
Foreign languages[a]	56.0	62.1	68.9	69.6	72.4	70.0	69.4	64.9
Home economics	66.4	65.2	65.3	65.5	65.9	64.7	63.1	63.4
Industrial arts	57.1	61.5	68.9	68.6	72.2	73.9	72.8	70.3
Journalism	59.3	26.5	56.2	53.2	38.8	60.9	59.5	61.3
Library science	85.6	76.8	78.0	77.8	81.8	82.5	69.0	56.5
Mathematics	59.0	66.3	75.8	74.2	73.9	74.1	70.8	69.1
Music[a]	68.5	68.9	74.5	74.2	72.9	70.1	71.0	68.6
Physical education--Men[a]	47.1	60.2	66.1	64.3	69.1	65.7	65.4	63.8
Physical education--Women[a]	76.3	78.2	79.5	79.6	84.2	80.3	78.3	73.8
General science	52.0	64.2	73.5	71.0	73.5	67.4	69.9	65.0
Biology	45.4	58.5	65.0	66.2	68.3	66.7	67.6	64.3
Chemistry	36.1	54.3	65.3	64.4	65.0	61.8	60.5	60.6
Physics	51.5	47.3	69.6	62.1	66.7	60.1	61.4	58.8
Social studies	51.8	59.8	65.2	64.9	64.2	60.5	60.2	59.2
Speech	57.8	61.5	69.9	65.9	65.9	61.4	60.5	57.5
Total, high-school subjects[b].	55.7%	63.2%	67.8%	68.1%	69.2%	67.0%	66.7%	64.3%
Grand total[b]	65.8%	70.7%	73.7%	73.6%	74.4%	72.7%	72.2%	69.7%

[a] Includes persons prepared to teach the subject in elementary schools.

[b] Includes persons prepared for ungraded assignments such as special education, library science, and guidance counseling.

The percentages of graduates entering teaching biennially since 1954 by major areas of preparation are reviewed in Table 8. The slight over-all moderation in the percentage entering teaching noted since 1962 is generally observed among the fields with the possible exceptions of agriculture and biology where the percentages have tended to remain constant or to rise slightly in 1967. Each of these estimates may reflect minimum levels of entry because they may be increased by the possible entry of persons in the group of approximately 15 percent for whom no follow-up information is available. The percentages of 1967 graduates for whom follow-up information is not available range among the subject-area groupings from 9.5 percent of persons prepared for junior high-school subjects to 41.1 percent of persons prepared to be guidance counselors.

A conservative estimate of the supply of beginning teachers who likely will be employed in classrooms in the fall of 1968 is provided in Table 9. In this table the estimated total number of teacher education graduates in 1968 in each subject is modified by the percent of graduates in that subject last year who actually entered classrooms by November 1, 1967.

State-by-State Differences

Listed in Table 10 are the percents of prospective teachers graduated in each state in 1967 who entered the profession by last November. Comparisons based on these data have limited meaning owing to the differences in the supply-demand situation in these states, differences in the numbers of nonresident prospective teachers being educated in the states, and differences in the percents of teacher education graduates for whom follow-up information is available.

At the elementary-school level while 78.0 percent of the class of 1967 entered teaching by November 1967, the proportions among the states who are known to have entered classroom teaching range from 29.4 percent in Florida to 90.9 percent in South Dakota. At the high-school level the percentages of prospective teachers known to have entered teaching immediately after graduation range from 28.2 percent in Florida to 100.0 percent in the District of Columbia. In both of these political subdivisions the occupational status is known for a relatively small proportion of all graduates.

Prospective Teachers Leaving the State in Which They Were Graduated

Also shown in Table 10 are the percentages of teacher education graduates who entered teaching last year who were employed in states other than those in which they were prepared. As noted elsewhere, the differences in the demand for beginning teachers and in the extent to which nonresident students are enrolled within the states would result in differences in the "holding power" of the states.

At the elementary-school level the percents of graduates entering positions outside the state in which they were prepared range from 4.4 percent in Florida to 40.7 percent in South Dakota. The percentages of prospective high-school teachers accepting teaching positions outside the state in which they completed their preparation range from 3.4 in New Jersey to 40.2 in South Dakota.

Teacher Education Graduates Not Entering Teaching

Table 7 shows the status of the majority of the prospective teachers who did not enter the profession immediately following their graduation. Delayed entry into teaching may be expected from many persons who continued formal study (5.7 percent), entered military service (1.4 percent), entered full-time homemaking (2.5 percent), and were actively seeking a teaching position (0.9 percent). Additional follow-up information is needed to identify the extent these persons may be expected to enter classrooms in future years.

TABLE 9.--ESTIMATE OF THE NUMBER OF 1968 TEACHER EDUCATION GRADUATES EXPECTED TO ENTER CLASSROOMS BY NOVEMBER 1, 1968

LEVEL OR SUBJECT 1	NUMBER EXPECTED TO COMPLETE PREPARATION 2	PERCENT ENTERING TEACHING LAST YEAR 3	ESTIMATED NUMBER EXPECTED TO ENTER CLASSROOM 4
ELEMENTARY SCHOOL (TOTAL)	92,608	77.9	72,154
REGULAR INSTRUCTION	89,941	78.1	70,243
ART	873	67.5	589
FOREIGN LANGUAGE	342	75.6	258
MUSIC	842	76.0	639
PHYS. AND HEALTH EDUCATION	610	69.8	425
SECONDARY SCHOOL (TOTAL)	136,242	64.1	87,320
AGRICULTURE	2,047	57.2	1,170
ART	5,802	66.2	3,840
BUSINESS EDUCATION	9,001	63.5	5,715
DISTRIBUTIVE EDUCATION	475	51.6	245
ENGLISH	22,895	66.3	15,179
JOURNALISM	206	61.3	126
SPEECH AND DRAMATIC ARTS	3,430	57.5	1,972
FOREIGN LANGUAGES (TOTAL)	9,025	64.7	5,839
HOME ECONOMICS	6,780	63.4	4,298
INDUSTRIAL ARTS	4,338	70.3	3,049
JUNIOR HIGH SCHOOL SUBJECTS	770	80.7	621
MATHEMATICS	10,349	69.1	7,151
MUSIC	6,633	67.5	4,477
PHYS. AND HEALTH EDUCATION	14,530	67.6	9,822
NAT. AND PHY. SCIENCES (NOT SPECIFIED)	1,488	59.5	885
GENERAL NAT. AND PHYS. SCIENCES	2,160	65.0	1,403
BIOLOGY	5,940	64.3	3,819
CHEMISTRY	1,241	60.6	752
PHYSICS	537	58.8	315
SOCIAL STUDIES (TOTAL)	27,051	59.0	15,960
TRADE, INDUST., VOC., TECHNICAL	609	44.2	269
OTHER SEC. SCHOOL SUBJECTS	935	44.2	413
UNGRADED			
SPECIAL EDUCATION	5,711	71.9	4,106
LIBRARIAN	1,891	56.5	1,068
GUIDANCE COUNSELOR	3,418	53.6	1,832
SCHOOL PSYCHOLOGIST	466	58.7	273
SCHOOL SOCIAL WORKER	56	58.8	32
SCHOOL NURSE	283	49.1	138
OTHER UNGRADED	2,767	52.3	1,447

TABLE 10.--LOCATION OF PERSONS WHO WERE GRADUATED BETWEEN SEPTEMBER 1, 1966
AND AUGUST 31, 1967, WITH QUALIFICATIONS FOR STANDARD CERTIFICATES
AND WHO ENTERED TEACHING, 47 STATES AND D. C. REPORTING

STATE	ELEMENTARY SCHOOL NUMBER	ELEMENTARY SCHOOL PERCENT TEACHING IN STATE	ELEMENTARY SCHOOL PERCENT TEACHING OUTSIDE STATE	ELEMENTARY SCHOOL PERCENT TEACHING TOTAL	SECONDARY SCHOOL NUMBER	SECONDARY SCHOOL PERCENT TEACHING IN STATE	SECONDARY SCHOOL PERCENT TEACHING OUTSIDE STATE	SECONDARY SCHOOL PERCENT TEACHING TOTAL
1	2	3	4	5	6	7	8	9
ALABAMA	1,065	52.2	25.0	77.2	2,499	33.8	14.4	48.2
ARIZONA	1,091	41.5	28.7	70.2	1,126	33.5	19.6	53.1
ARKANSAS	730	56.4	23.8	80.3	1,734	42.4	17.6	60.0
COLORADO	1,006	40.3	17.3	57.6	2,225	31.0	17.4	48.4
CONNECTICUT	1,284	57.2	14.3	71.4	1,338	51.2	13.8	65.0
DELAWARE	143	45.5	32.9	78.3	209	33.0	26.3	59.3
DISTRICT OF COLUMBIA	146	22.6	32.9	55.5	10	70.0	30.0	100.0
FLORIDA	2,051	25.0	4.4	29.4	2,691	23.8	4.4	28.2
GEORGIA	1,244	70.8	6.8	77.7	1,905	59.7	4.3	64.0
HAWAII	406	34.0	13.3	47.3	299	44.8	5.0	49.8
IDAHO	411	37.7	29.9	67.6	576	25.7	26.6	52.3
ILLINOIS	2,621	61.0	18.5	79.5	3,045	57.0	7.9	65.0
INDIANA	1,997	67.1	21.3	88.4	3,432	53.1	17.4	70.5
IOWA	1,535	56.0	24.9	80.9	2,528	48.8	23.9	72.7
KANSAS	1,321	60.9	19.6	80.5	2,053	51.6	16.8	68.4
LOUISIANA	1,463	60.6	9.4	70.0	1,870	45.2	7.9	53.1
MAINE	318	64.5	19.5	84.0	743	41.2	13.7	54.9
MARYLAND	1,022	74.4	8.8	83.2	1,173	58.6	9.1	67.7
MASSACHUSETTS	1,790	59.4	17.4	76.8	2,107	43.4	16.7	60.1
MICHIGAN	3,926	62.1	9.7	71.8	5,609	55.3	7.4	62.6
MINNESOTA	1,957	64.3	21.3	85.6	2,792	50.5	23.5	74.0
MISSISSIPPI	991	59.3	20.4	79.7	2,137	51.2	18.2	69.4
MISSOURI	1,471	54.7	24.9	79.5	2,610	52.0	20.0	72.0
MONTANA	595	55.5	18.3	73.8	763	45.0	24.0	68.9
NEBRASKA	1,313	45.1	32.2	77.3	1,661	47.7	21.1	68.8
NEW HAMPSHIRE	279	49.5	34.1	83.5	413	45.0	36.1	81.1
NEW JERSEY	2,157	78.1	6.4	84.5	2,521	66.3	3.4	69.7
NEW MEXICO	167	44.9	26.3	71.3	299	44.1	28.8	72.9
NEW YORK	7,575	75.0	7.3	82.2	7,354	55.9	6.1	62.0
NORTH CAROLINA	1,643	60.2	25.9	86.1	3,082	50.2	20.5	70.7
NORTH DAKOTA	444	50.5	32.9	83.3	848	43.4	24.9	68.3
OHIO	4,249	62.8	14.6	77.5	5,271	51.7	13.8	65.5
OREGON	1,091	59.5	17.0	76.4	1,544	43.7	13.9	57.6
PENNSYLVANIA	4,610	65.9	19.9	85.8	7,328	54.7	17.9	72.6
RHODE ISLAND	325	62.5	24.3	86.8	543	41.6	17.3	58.9
SOUTH CAROLINA	655	49.9	26.0	75.9	1,164	44.0	17.4	61.3
SOUTH DAKOTA	615	50.2	40.7	90.9	1,056	33.5	40.2	73.7
TEXAS	4,831	68.4	7.6	76.0	6,093	56.9	6.8	63.7
UTAH	971	56.7	20.7	77.4	1,460	42.0	19.5	61.5
VIRGINIA	969	75.6	12.1	87.7	1,797	62.9	10.5	73.5
WASHINGTON	1,754	70.5	15.2	85.6	2,028	58.1	13.3	71.4
WEST VIRGINIA	583	44.6	36.5	81.1	1,564	34.7	28.6	63.3
WISCONSIN	2,116	68.5	19.2	87.7	2,845	54.4	15.8	70.2
WYOMING	124	56.5	19.4	75.8	203	47.3	18.7	66.0

The entry into advanced study seems to be more prevalent among the men than among women prospective teachers, and more prevalent among the persons preparing for high-school subject assignments than among those preparing for elementary-school assignments. As may be expected, entry into military service is a condition influencing men almost exclusively and entering homemaking is a condition influencing women exclusively to postpone or defer permanently their entry into classroom teaching.

The proportion of graduates known to be seeking a teaching position in November following their graduation (0.9 percent) is the same as the level reported for 1967. Highest proportions of teacher education graduates still seeking a teaching job in November were in foreign languages (1.9 percent), art (1.7 percent), speech and drama (1.6 percent), and social studies (1.4 percent). Lowest proportions of graduates in a given subject area who were seeking a teaching position were: elementary-school foreign languages and physical education, junior high-school subjects, trade-industrial-vocational subjects, and journalism (0.0 percent), agriculture (0.1 percent), natural and physical sciences not specified (0.2 percent), industrial arts (0.3 percent), mathematics (0.4 percent), general natural and physical sciences (0.4 percent), and chemistry (0.4 percent). The possibility that these very small differences are related to the status of supply and demand for new teachers in these subjects is supported by the summary beginning on page 51 of this report.

Entry into other occupations is reported for almost equal proportions of men and women and the decision to enter occupations other than teaching is not widespread among persons completing their preparation to teach.

THE DEMAND FOR NEW TEACHERS

This section contains estimates of the demand for new teachers and the demand for beginning teachers. The separate estimate of the demand for beginning teachers allows comparison with the supply of beginning teachers reviewed in the previous section of this report. Following a review of the difference between the estimated demand for new and beginning teachers are descriptions of two criteria for estimating the demand for new teachers. Finally, this section provides an estimate of the demand for beginning teachers by types of teaching assignment.

Difference Between Demand for New and Demand for Beginning Teachers

A new teacher is a person entering or re-entering active status who was not employed as a full-time teacher during the preceding school year. A beginning teacher is a person entering active employment as a full-time teacher for the first time. Therefore, the estimated demand for new teachers exceeds the demand for beginning teachers by the number of former teachers expected to re-enter teaching this year.

Estimates of the rate of re-entry of former teachers derived from four sampling studies are shown in Table 11. The rates at the elementary-school level range between 3.2 percent and 4.8 percent, and seem to be slightly lower in recent years than the levels estimated for 1957-58 and 1959-60. The rates at the secondary-school level observed in the four studies varied between 3.0 percent and 4.2 percent. The lowest and highest estimate of the re-entry rate among secondary-school teachers have been derived from the two most recent sampling studies.

The rate of re-entry of former teachers being estimated for 1968 is 3.2 percent in elementary and 3.0 percent in secondary schools, the same as the rates estimated for the 1966-67 session in the most recent survey studies. Applying these rates to the total number of full-time teachers employed in 1967-68 (1,029,211 in elementary schools and 806,847 in secondary schools) provides an estimate that 32,900 former elementary-school teachers and 24,200 former secondary-school teachers will re-enter active employment as teachers in fall 1968 following an interruption of at least one year.

The summary in Table 11 shows that the rates of re-entry of former teachers may not be constant. The variation may be a result of the numerous conditions influencing the supply and demand for teachers and also it may reflect normal differences associated with sampling error. Multiple factors influencing these estimates of the rate of re-entry require that the planning estimates be interpreted only in very general terms.

Criteria for Estimating Demand for New Teachers

Two equally useful estimates of the demand for new teachers are presented in this report. The first shows the teacher demand related to a minimum standard, the second reviews the teacher demand related to current practices, including the adjustment of recent trends to account for the continued influence of the Elementary and Secondary Education Act of 1965.

Components of the first estimate are the minimum standards of staffing characteristics required for effective instruction in the public schools. This estimate is based on an assumption that the demand for teachers must be related to achieving at least the minimum level of quality in staffing for public education. The estimate based on this assumption is termed the Quality Criterion Estimate (QCE).

The second estimate is based on a continuation of the trends in the improvement of staffing characteristics of public schools in recent years with an adjustment to account for the growth in staff size expected to result from the continued influence of the Elementary and Secondary Education Act of 1965. This second estimate is termed the Adjusted Trend Criterion Estimate (ATCE).

The Trend Criterion Estimate of demand for new teachers reported in the 1966 edition of this series is not feasible this session because it is difficult to control accurately the influence of the Elementary and Secondary Education Act upon estimates of the last two years of staffing growth. The statistical estimate, if available, would be of limited usefulness for this report, and therefore is not continued in the present study.

The numbers of new teachers required by each criterion for estimating the demand for new

TABLE 11.--SUMMARY OF ESTIMATES OF THE DEMAND FOR BEGINNING TEACHERS TO REPLACE PERSONS WHO LEAVE TEACHING

Group	Percent of staff in the fall				Planning estimate for 1967-68
	1957-58[a]	1959-60[a]	1964-65[b]	1965-66[c]	
1	2	3	4	5	6
ELEMENTARY SCHOOL					
Teachers separating and not transferring to new location for the following year .	11.2%	8.1%	8.5%	5.6% (8.6)[d]	8.1%
Former teachers re-entering service for the following year	4.8	4.1	4.0	3.2	3.2
Difference (positions created by teacher separations which will need to be filled by beginning teachers for the following year)	6.4	4.0	4.5	2.4	4.9
SECONDARY SCHOOL					
Teachers separating and not transferring to new location for the following year	10.4	8.1	9.9	8.3 (9.0)[d]	8.6
Former teachers re-entering service for the following year	4.1	3.6	4.2	3.0	3.0
Difference (positions created by teacher separations which will need to be filled by beginning teachers for the following year)	6.3	4.5	5.7	5.3	5.6

a/ Based on: Lindenfeld, Frank. Teacher Turnover in Public Elementary and Secondary Schools, 1959-60. U.S. Department of Health, Education, and Welfare, Office of Education, Circular No. 678. Washington, D.C.: Government Printing Office, 1963. p. 15.

b/ Based on responses of teachers in a national sampling survey: National Education Association, Research Division. The American Public-School Teacher, 1965-66. Research Report 1967-R4. Washington, D.C.: the Association, 1967. 102 p. Rates of loss to the profession are estimated by subtracting the number of new positions created for 1965-66 from the estimated number of persons teaching that year who were not teaching the previous year, and calculating the percent of the 1964-65 staff represented by this estimated number of positions vacated by teacher separations. Re-entry rates are derived by estimating the number of teachers in 1965-66 who were not teaching in 1964-65 but who have already had teaching experience, then calculating the percent of the 1964-65 staff represented by them.

c/ Based on responses of teachers in the 1967 Teacher Opinion Poll conducted by the NEA Research Division. The estimates were derived in the manner described above.

d/ Rate in parentheses is estimated from responses of teachers in 1965-66 about their expected employment status in 1966-67. (See The American Public-School Teacher, 1965-66.)

teachers in 1968-69 are presented and discussed in the following sections.

The Quality Criterion Estimate

The Quality Criterion Estimate is based on the number of new teachers needed to achieve immediately a standard for minimum quality in the staffing of public-school classrooms. The following are discussed separately as components of this estimate: (a) the number of new teachers needed to fill new positions being created to accommodate enrollment changes; (b) the number of new teachers needed to replace the teachers who are interrupting or terminating their careers; (c) the number of teachers having substandard professional qualifications who need to be upgraded or replaced; (d) the number of new teachers needed to reduce overcrowded classes to reasonable maximum sizes; and (e) the number of new teachers needed to provide adequate staffing of new educational offerings, added special instructional services, and reorganization for instruction.

The Quality Criterion Estimate of teacher demand should be useful to the teaching profession, civic leaders, public officials, and research analysts in assessing the manpower requirements for attaining minimum quality in public education. This estimate shows the demand for teachers required by a minimum level of quality in the staffing practices applied to all classrooms without consideration to the obstacles to attaining this standard immediately.

The Demand for New Teachers, Based on the Quality Criterion Estimate--Summarized in Table 12 are the estimated numbers of new teachers needed to achieve the Quality Criterion in each of several components of teacher demand. The estimated total demand for 499,650 new teachers is an increase of 249,050 positions (13.6 percent) over the number of full-time teachers employed in the fall of 1967. The components of this estimate are described in the following paragraphs.

Increased Enrollment--The U.S. Office of Education has estimated that in fall 1968 the number of full-time and part-time elementary-school teachers in public schools will enlarge by 12,000; and secondary-school teachers, by 37,000. These estimates of staff enlargement include an expectation of the continued influence of the Elementary and Secondary Education Act of 1965. These estimated increases represent 1.2 percent of the number of full-time elementary-school teachers in fall 1967 (1,029,211), 4.5 percent of the number of full-time secondary-school teachers (806,847), and 2.7 percent of the total number of public-school teachers (1,836,058).

Preliminary estimates by the NEA Research Division reflect recent influences of federal programs upon staffing practices in addition to the trends of other factors influencing the staff requirements in public education. These projections are sent to the states for review and are then published as Estimates of School Statistics for the current session. The preliminary projected estimate of the number of teaching positions in 1968-69 comprises an increase of 40,000 in elementary schools and 40,000 in secondary schools with a total of 1,918,200 positions. This total is slightly greater than the projected total number of full-time teachers to be employed in public schools (estimated in this report at 1,900,558) because it allows for the full-time equivalents of part-time teachers and assumes staff growth during the school year. However, the NEA Research Division estimate projects greater growth in the number of elementary- and secondary-school teachers than is estimated for this report.

In summary, the estimated growth in the numbers of full-time public-school teachers is 26,000 in elementary schools and 38,500 in secondary schools. These are the averages of the two estimates of growth described above. This estimate is used in the remainder of this report to calculate the number of new teachers needed to fill new positions created to continue recent trends of staffing improvements as well as to provide instructional services for the enlarged enrollments. Owing to the use of projections of staffing as related to enrollments in recent years, this estimate may reflect a small part of the demand for new teachers estimated separately in some other components.

Teacher Turnover--Earlier studies in this series have used an estimate that the number of positions vacated by teachers who leave the profession each year equals about 8 percent of the total number of teachers. Information from recent studies (Table 11) provided a planning estimate for the 1967 edition of this series. The same rates are used for the 1968 edition (8.1 percent of elementary-school teachers and 8.6 percent of high-school teachers). The rate of loss projected as a planning estimate for elementary-school teachers is the same as the level estimated for 1959-60. The rate of loss projected as a planning estimate for high-school teachers is greater than the level estimated for 1959-60, but is not as high as the rates estimated in two of the four surveys reviewed in Table 11.

The variation in the estimated rates of teacher loss and re-entry derived from the four studies documents the errors in sampling estimates as well as the possibility of continued change in the factors which influence the demand for new teachers. The U.S. Office of Education studies show differences in the rates of teacher turnover and re-entry among school districts grouped by their geographic region. Studies of teacher turnover reported by several states show there are wide differences among the states in these rates. Further, the rates of turnover and re-entry are expected to fluctuate with changes in the adequacy of the supply of beginning teachers, the total demand for qualified teachers, composition of the teaching staff, characteristics of persons in the pool of qualified former teachers, conditions related to the teaching assignments being vacated, rate by which the staff size is enlarged, and the varied economic conditions which influence turnover and re-entry of qualified former teachers. The consideration of the sampling errors of the four studies, continued changes in the conditions influencing teacher turnover and re-entry, and need for additional data to support differences applicable to each sex and subject grouping suggest that the planning estimates used for this study be treated only in very general terms.

In summary, for this study the planning estimate of the demand for new teachers to replace those who leave the profession is 8.1 percent of the number of full-time elementary-school teachers and 8.6 percent of the number of full-time secondary-school teachers. Subtraction of the numbers of teachers expected to re-enter the profession following an interruption of one or more years from the total estimated demand for new teachers provides an estimate of the demand for beginning teachers. The numbers of re-entering teachers estimated for 1968-69 is 32,900 in elementary and 24,200 in secondary schools. Applying these estimates to the number of full-time elementary- and full-time secondary-school teachers in 1967-68 provides the following estimates of demand for new and beginning teachers in fall 1968 to fill positions created by teacher turnover:

Level	Turnover-based demand in 1968-69 for: New teachers	Beginning teachers
Elementary school	83,300	50,400
Secondary school	69,400	45,200
Total	152,700	95,600

Replacement of Teachers Having Substandard Qualifications--These estimates are based on an assumption that the minimum educational requirement for qualified teachers is completion of the bachelor's degree and the teachers having less than a bachelor's degree need to be upgraded or replaced. For many of these teachers who lack only one or two years of college this replacement may be on a short-term basis while they return to teacher preparation institutions to complete their degree.

The data in Table 24 (page 53) show an estimate that 8.0 percent of all elementary-school teachers in 1967-68 lacked the bachelor's degree. Applying this percentage to the total number of full-time elementary-school teachers employed in 1967-68 provides an estimate that 82,337 elementary-school teachers lacked the bachelor's degree. The estimated demand for 65,900 elementary-school teachers allows for about 20 percent of the 82,337 elementary-school teachers lacking the bachelor's degree to have completed the degree requirements or to have resigned prior to the 1968-69 session.

The estimate of demand at the secondary-school level is based on the estimated percentage of secondary-school teachers who did not have the bachelor's degree in 1967-68, shown in Table 24. The estimate of 1.4 percent applied to the 806,847 full-time secondary-school teachers employed in the fall of 1967 indicates that 11,296 secondary-school teachers did not have the bachelor's degree in 1967-68. The estimate that 9,000 of these need to be replaced is based on an assumption that 20 percent of the 11,296 teachers lacking the degree will have subsequently graduated or have resigned.

General support for these estimates is provided by the reports from the states to the U.S. Office of Education showing the number of full-time classroom teachers who do not meet the state regular certification requirements for the positions which they occupy. The total number of substandard teachers reported and estimated in the fall 1967 survey was 90,500 teachers: 56,500 in elementary schools and 34,000 in secondary schools. Owing to differences among the states in the minimum educational requirements for certification, some of which certify teachers with less than a bachelor's degree, and differences in specific requirements beyond the attainment of the bachelor's degree, the data from the U.S. Office of Education fall survey are not entirely comparable with the estimates being used in this report.

Reduction of Overcrowded Classes--A national survey by the NEA Research Division in 1967-68 provides a general estimate of the distribution of class size and teacher load in public

TABLE 12.--ESTIMATED DEMAND FOR NEW TEACHERS, BASED ON THE QUALITY CRITERION

Source of demand	Estimated demand for new teachers: Elementary	Secondary	Total
1	2	3	4
Staff requirement of increased enrollment	26,000	38,500	64,500
Teacher turnover ...	83,300	69,400	152,700
Replacement of teachers having substandard qualifications	65,900	9,000	74,900
Reduction of overcrowded classes	13,750	8,950	22,700
Special instructional services	112,350	72,500	184,850
Total	301,300	198,350	499,650

schools. These percentage distributions were applied to the total number of full-time teachers in the fall of 1967 to obtain an estimate of the number of persons who may have been assigned extremely large classes during 1967-68.

The intervals in these distributions provide a base for these estimates of the minimum numbers of additional teachers needed to reduce maximum size of classes in elementary schools to no more than 34 pupils each and the maximum average daily teacher load in secondary schools to no more than 199 pupils.

Data on the staffing practices for classes having shortened sessions or double-shift sessions are not available. Therefore, this summary does not include an estimate of additional demand for new teachers resulting from these classes.

Special Instructional Services--In this classification are the new teachers needed to provide special instructional services, enlarge the scope of educational offerings, and provide special programs for pupils having special learning needs (physically, mentally, and emotionally handicapped, the culturally disadvantaged, etc.). It is estimated that at least 184,850 additional teachers are needed for this component of demand. It is not feasible to establish an accurate estimate of the demand for new teachers resulting from this component because prescriptive statements of minimum standards and precise data about present conditions are nonexistent or limited.

A minimum of 42,850 new teachers are needed to provide kindergarten for the same proportion of five- and six-year-old children as the proportion of seven-year-olds now enrolled in school. This estimate does not include the number of new teachers needed to replace present kindergarten teachers having substandard qualifications, to replace present kindergarten teachers who interrupt or terminate their careers, or to provide improvement of the teacher-pupil ratio at this level of instruction.

At least 2,000 new teachers are estimated to be needed to enlarge offerings in elementary and secondary schools which have curtailed enrollments in programs of instruction having a critical shortage of qualified applicants. It is not possible to estimate the extent that schools have limited or nonexistent offerings in industrial arts, physical sciences, mathematics, vocational-technical subjects, and selected subjects in elementary schools as a result of the chronic short supply of qualified applicants.

At least 23,000 new teachers are needed to reduce the impact of misassignment of teachers in elementary and secondary schools. These represent about one-third of the number of teachers estimated to be teaching full-time in fields other than those of their major preparation--many have improved their preparation following graduation and, with the improving supply-demand situation, many may have moved into more appropriate assignments. This estimate does not include the number of new teachers needed to reduce the effect of the additional 150,000 teachers who are misassigned for more than half but not all of their teaching time.

At least 117,000 new teachers are needed to make significant progress toward providing special education to children and youth who require it. This minimum estimate is only half of the number of new teachers (233,500) which would be needed this year to provide special education for the 10 percent of school-age children and youth needing this program. These estimates do not include the number of new teachers needed to replace present special education teachers having substandard preparation and the demand created by normal turnover of teachers in these assignments.

Estimated Demand for Beginning Teachers Based on the Quality Criterion--Listed below are the estimated numbers of new and beginning teachers needed to achieve the demand based on the Quality Criterion Estimate.

	Number of teachers		
	Elementary	Secondary	Total
Demand for new teachers based on the Quality Criterion Estimate	301,300	198,350	499,650
Expected re-entry of former teachers ..	32,900	24,200	57,100
Demand for beginning teachers	268,400	174,150	442,550

The Adjusted Trend Criterion Estimate

The Adjusted Trend Criterion provides an estimate of the number of new teachers who will actually be employed by public school systems in the school year 1968-69 as indicated by recent staffing practices. This estimate is projected from information about the numbers of new teachers employed in recent years. The demand for new teachers in this estimate reflects a continuation of current trends toward improved staffing conditions rather than immediate achievement of the standards of minimum quality in the staffing of classrooms provided by the Quality Criterion Estimate.

The projections based on the Adjusted Trend Criterion should be especially useful to college and university counselors of potential teachers, to individuals planning careers in teaching, to former teachers considering reentry into teaching, and to educational leaders.

This projection provides an estimate of the immediate condition of teacher demand--the minimum number of employment opportunities for beginning and re-entering teachers during the school year 1968-69.

The Demand for New Teachers, Based on the Adjusted Trend Criterion Estimate--Estimates of the number of teaching positions to be filled by the supply of new teachers for the opening of a given school session may be based on trends observed in two components reviewed earlier: (a) positions being created or eliminated as a result of changes in enrollment, organization for instruction, and in the pupil-teacher ratio; and (b) positions created by the teachers who are terminating or interrupting their careers in the public schools during or at the close of the preceding school year.

Teachers Needed To Fill New Positions (ATCE)--The demand for new teachers is influenced by the creation of new positions for increased enrollment, changes in organizational placement of certain grades, and other organizational changes influencing the pupil-teacher ratio (reduction of the number of large classes and provision of specialized educational services). The estimated number of new teaching positions being created for 1968-69 to provide for increased enrollment and continuation of trends in the improvement of staffing related to enrollment are reviewed as part of the Quality Criterion Estimate of demand. It is estimated that between 1967-68 and 1968-69 the number of teachers will increase by 26,000 in elementary schools and by 38,500 in secondary schools.

Teachers Needed To Replace Those Interrupting or Terminating Their Careers--Estimates of the rates of teacher turnover and re-entry were reviewed as one component of the Quality Criterion Estimate of the demand for new teachers. It is estimated that 83,300 new elementary-school teachers will be needed in 1968-69 to replace those who leave employment as teachers following 1967-68, and among these, 50,400 will need to be beginning teachers. At the secondary-school level it is estimated that 69,400 new teachers will be needed in 1968-69 to replace those who have left teaching, and 45,200 of these will need to be beginning teachers.

Total Estimated Demand for New Teachers Based on the Adjusted Trend Criterion (ATCE)--Combination of the estimates from the two components of demand reviewed above provides an estimate that the number of new teachers for whom employment is virtually assured in 1968-69 is 109,300 in elementary schools and 107,900 in secondary schools. These estimates include the demand for 76,400 beginning teachers in elementary schools and 83,700 beginning teachers in secondary schools.

The trends in demand for qualified public-school teachers for a given school year may be changed as a result of changes in various factors such as the following:

- Major modification in the school program and assignment load of teachers
- Enrollment growth related to enlarged educational programs
- Reduction in the ratio of pupils per teacher to provide special programs being encouraged through federal and state legislation
- Change in the rate by which persons having substandard certification are being replaced
- Elimination of large classes.

Some of these conditions have been influencing the demand for new teachers during the past several years. The trends in staffing practices observed in the past are included in the data used to derive the estimates of teacher demand based on the Adjusted Trend Criterion. For example, information given later in this report shows marked improvement in the educational qualifications of elementary-school teachers during the past 10 years.

Owing to the lack of precise data, it is difficult to estimate the specific effects of new conditions influencing some of the components of teacher demand. For example, present data do not allow identification of the number of teachers being counted in regular staff turnover or attrition who have substandard certification and are encouraged to resign largely because of this condition.

Other Factors Influencing the Demand for New Teachers

The U.S. Office of Education has estimated that 11,740 new teachers will be needed in the nonpublic schools in the fall of 1968. About 1,500 new teachers will be needed in the dependent schools overseas. Replacement may be required for an increasing number of experienced teachers as a result of the heightened interest in providing them opportunities for advanced training.

Additional vacancies are certain as experienced teachers accept specialized positions being established through the impact of increased support to programs related to public education or which require persons having the characteristics of effective teachers. The provision of funds to employ remedial instruction specialists, school social workers, research analysts, program coordinators, state department of education staff members, and other positions outside the classroom will attract an unknown number of teachers. The effect of these programs upon the typical components of teacher supply and demand has not been documented.

The increased enrollments at the 2-year and 4-year college level may continue to provide employment opportunities to public-school teachers desiring to move to these levels, thereby opening many positions for new teachers in the elementary and secondary schools. It has been estimated that in the junior colleges alone, 100,000 more teachers will be needed within the 10 years between 1967 and 1977.

Probably the general shortage in other occupations which attract young people having at least the bachelor's degree and the increased demands of the military services are contributing also to an increase in the exodus of qualified teachers and the loss of potential teachers.

It is difficult to estimate the extent these conditions are changing the entry rate of potential teachers and the turnover rate of experienced teachers. It seems obvious, however, that the projected demand for teachers should be considered as a minimum estimate.

Summary of the Estimates of Demand for New Teachers

Listed (page 34) are the total numbers of new teachers who will be needed in the fall of 1968 as determined by the two criteria. An estimate of the demand for beginning teachers may be obtained by subtracting the 32,900 elementary- and 24,200 secondary-school teachers expected to re-enter the profession.

TABLE 13.--RELATIVE DEMAND FOR NEW ELEMENTARY- AND HIGH-SCHOOL TEACHERS IN VARIOUS STATES AND PERCENT OF ALL PUBLIC-SCHOOL TEACHERS IN ELEMENTARY SCHOOLS, 1948-49 TO 1967-68

Session	Reporting states			All public schools	
	Number of new teachers	Percent in elementary schools	Number of states	Number of teachers	Percent in elementary schools
1	2	3	4	5	6
1948-49	36,208	57.2%	21	887,175[a]	64.5%
1949-50	35,242	56.8	18	913,671	64.5
1950-51	41,793	57.7	23 + Alaska & D.C.	938,268[a]	64.4
1951-52	45,658	58.9	26 + Alaska & D.C.	962,864	64.4
1952-53	45,859	61.4	26	997,501[a]	64.0
1953-54	58,010	60.9	29 + Alaska & D.C.	1,032,138	63.7
1954-55	54,875	60.1	30 + D.C.	1,068,000	64.7
1955-56	58,257	60.6	30 + D.C.	1,141,000[b]	64.2
1956-57	62,099	59.9	29 + D.C., Hawaii, & Puerto Rico	1,199,000[b]	62.6
1957-58	62,579	56.6	32 + Alaska & D.C.	1,259,000[b]	62.4
1958-59	59,651	54.4	30 + Alaska, Hawaii, D.C., & Puerto Rico	1,306,000[b]	62.4
1959-60	57,810	53.6	27 + D.C.	1,355,000[b]	61.4
1960-61	59,115	55.7	26 + D.C.	1,408,000[b]	60.9
1961-62	64,753	53.1	29 + D.C.	1,461,000[b]	59.5
1962-63	53,192	53.5	24 + D.C.	1,508,000[b]	58.8
1963-64	48,097	51.0	22 + D.C.	1,578,000[b]	57.5
1964-65	58,948	53.0	27 + D.C.	1,648,000[b]	57.0
1965-66	79,955	50.5	29	1,710,000[b]	56.4
1966-67	88,370[d]	50.7[d]	24	1,788,105[c]	56.2
1967-68	92,352[d]	48.7[d]	28 + D.C.	1,842,600[c]	55.7

[a] Estimated from U.S. Office of Education, Biennial Surveys of Education.

[b] U.S. Department of Health, Education, and Welfare, Office of Education. Projections of Educational Statistics to 1976-77. 1967 edition. Washington, D.C.: Government Printing Office, 1968. p. 47.

[c] U.S. Department of Health, Education, and Welfare, Office of Education. Digest of Educational Statistics. 1967 edition. Washington, D.C.: Government Printing Office, 1967. p. 37.

[d] Librarians are counted as secondary teachers, as in earlier studies.

Base	Number of new teachers in demand for fall 1968		
	Elementary	Secondary	Total
Adjusted Trend Criterion Estimate	109,300	107,900	217,200
Quality Criterion Estimate	301,300	198,350	499,650

Characteristics of Demand for New Teachers as Suggested by Assignments in Selected States

Varying numbers of states have reported the number of new teachers employed and their assignments as part of the past 20 surveys of teacher supply and demand. (These included experienced teachers returning to the classroom as well as the beginning teachers.) For the present study the states were asked also to report for each assignment the total numbers of teachers and the number of new teachers who are re-entering active service following an interruption of at least one year. The summary of information from the states which were able to report data for 1967-68 is provided in Table 13.

The distribution of the new teachers among teaching assignments in 1967-68 provides an estimate of the comparative demand between elementary- and high-school levels and among selected assignment areas. As in earlier studies of this series, a general estimate of the 1968-69 demand for new teachers in each subject is projected by applying the percentage distribution of new teachers reported last year to the total estimated demand for new teachers this year.

Several states reported additional information about the percent of the total number of teachers in each assignment who were new teachers, and the percent of new teachers who are beginning teachers. This information provides the source for an alternate estimate of the number of new and beginning teachers to be employed in 1968-69.

Relative Demand for New Elementary- and High-School Teachers

Shown in column 2 of Table 13 are the total numbers of new teachers employed in 1967-68 who were given their complete or major assignment in either elementary- or high-school levels. The total demand for new elementary-school teachers was 1,038 fewer than the total demand for new high-school teachers in these 28 states. The new elementary-school teachers represented 49.4 percent of all new teachers. If librarians are included, as in earlier studies, the new elementary-school teachers represented 48.7 percent of all new teachers (shown in Table 13).

TABLE 14.--TWO ESTIMATES OF THE PERCENT DISTRIBUTION OF SECONDARY-SCHOOL TEACHERS BY MAJOR ASSIGNMENT

Major assignment	Percent of secondary-school teachers		
	Fifteen states reporting in 1966-67	Seventeen states reporting in 1967-68	Median of four sampling surveys
1	2	3	4
Agriculture	2.2%	1.3%	1.5%
Art	2.0	2.4	2.2
Business education ...	6.0	5.9	6.2
Distributive education	0.4	0.4	a/
English language arts.	19.4	18.4	21.5
Foreign languages	4.7	4.7	4.9
Home economics	5.1	4.3	4.6
Industrial arts	3.7	3.9	4.1
Junior high school ...	3.9	0.7	a/
Mathematics	12.1	12.0	14.0
Music	4.6	4.1	3.4
Physical and health education: Men	4.8	8.3	6.9
Physical and health education: Women ..	3.4		
Science	10.8	10.9	12.5
Social studies	12.1	13.1	14.9
Trade, industrial, vocational, technical	1.8	2.2	1.8
Special education	3.6	2.5	0.9
Other	...	4.9	0.6
Total	100.0%	100.0%	100.0%

a/ Category not used in tabulating staff by major assignment.

An estimate of trends in the relative demand for new teachers between the elementary- and high-school levels is provided by information reported by the varying number of states in the earlier studies of this series. Summarized in Table 13 are the total numbers of new teachers and the percents of these teachers being assigned to elementary schools in the reporting states since 1948-49. Also shown are the total numbers of public-school teachers in the United States during these same years with the percent of all teachers who are assigned duties in the elementary schools.

The information listed in column 6 of Table 13 shows a gradual reduction during the past 20 years in the proportion of all public-school teachers being assigned to elementary schools. This change is shown, also, among the percents of new teachers being assigned to elementary schools in the reporting states. The impact of the marked growth in elementary-school enrollments between 1952-53 and 1957-58 is reflected in the increased percents during these years shown in column 3. The influence of the increased annual growth in secondary-school enrollments upon the demand for new teachers probably has contributed to the lower proportions of new teachers being assigned to elementary schools in recent years.

The percents of all new teachers being assigned to elementary schools in the reporting states are consistently lower than the percents of all teachers in the nation being assigned to elementary schools. If conditions in the reporting states are representative of the nation, the information in Table 13 suggests that the relatively greater annual demand for new (re-entering and beginning) teachers in elementary schools than for high schools has been decreasing, and that during the past three years the demand for new elementary-school teachers was not widely different from the demand for new secondary-school teachers.

These data reflect demand for teachers as defined by the Adjusted Trend Criterion--the demand which has been observed in the employment of new teachers. The demand for new teachers based on the Quality Criterion during these years has consistently called for greater numbers of qualified new teachers being assigned to elementary schools than have been available for such assignment. Possibly, these proportions of new teachers being assigned to elementary schools might have been greater if the supply of qualified new teachers were equally adequate at both levels.

Relative Demand for New Teachers Among High-School Subjects, Adjusted Trend Criterion Estimate

The distribution of new teachers among the assignments reported by 28 states provides the basis for an estimate of the number of new teachers needed in each assignment in 1968-69. Summarized in column 2 of Table 16 are the numbers of new teachers which will be employed in each assignment in 1968-69 if the percentage distribution of new teachers observed last session in 28 states is projected to the estimated total number of new teachers to be employed in 1968-69.

The basis for an alternate estimate of the 1968-69 demand for new teachers in each assignment is provided by additional information reported for the second time in the present study. The reports of several states contained one or more of the following data by each teaching assignment: the total number of teachers, the number of new teachers, and the number of new teachers who were re-entering active status in 1967-68 following an interruption of at least one year. This additional information allows an estimate of the demand for new teachers for each assignment separately, based on information which reflects the combined influence of growth in total number of persons and the rate of teacher turnover.

Only 17 states were able to supply the total numbers of teachers in each assignment area. To allow correction for the strong likelihood that the summary distribution from these states is not representative of the national pattern, a second estimate of the distribution of all teachers by assignment areas was derived by using information from NEA Research Division sampling studies conducted during the past four years. The distributions derived from the reports of the 17 states and the median of the percents observed in the four most recent sampling surveys are shown in Table 14. In most assignments the differences in the percent of total staff being estimated by the two sources are smaller than 1 percentage point. The differences are attributable, in part, to the different numbers of assignment classifications (e.g., the junior high-school classification used in the 1967-68 survey includes some of the staff reported in other subjects in the sampling surveys). Other differences greater than 1 percentage point (English, mathematics, music, physical and health education, science, social studies, special education, and other subjects) may reflect sampling error as well as differences from the national average in the staffing assignment pattern of the 17 states reporting the total number of teachers in each major assignment classification.

The states are not consistent in the practice of reporting the numbers of persons assigned as librarians or counselors. It is not clear that all states count them as teachers or, if they do, whether or not they are classified by their titles. Therefore, information from the small number of states which reported these positions separately is used later in this report to estimate the demand for persons in these assignments.

Listed in column 5 of Table 15 are the averages of the percents of the staff in each major assignment who were new teachers in the 17 reporting states. The percents varied widely among the reporting states as shown in Appendix Table B which lists the low, high, and median percents reported among the 17 states. The variation of these rates among the reporting states suggests that the average percent does not provide a precise estimate--that the numbers of new teachers projected from these data should be interpreted only in very general terms.

The estimates shown in column 5 of Table 15 list the percents of total staff represented by

TABLE 15.--NUMBER AND PERCENT OF NEW TEACHERS, PERCENT OF STAFF WHO WERE NEW TEACHERS, AND PERCENT OF NEW TEACHERS WHO RE-ENTERED IN 1967-68, BY ASSIGNMENT

Assignment	Number of new teachers, 28 states	Percent distribution of new teachers		Average percent of staff who were new teachers, 17 states	Average percent of new teachers who were re-entering, 22 states
		28 states	17 states		
1	2	3	4	5	6
Elementary (total)					
Regular instruction[a]	40,228	89.5%	90.2%	9.9%	34.9%
Selected subjects					
Art	460	1.0	1.0	13.9	18.1[a]
Foreign language	90	0.2	0.1[b]	15.1[b]	17.6[c]
Music	1,006	2.2	2.0	12.0[d]	29.6[a]
Physical and health education	1,002	2.2	2.1[d]	15.9[d]	20.1[a]
Special education	2,185	4.9	4.6	12.3	31.5
Total, classroom instruction .	44,971	100.0%	100.0%		
Librarian	573			8.5	38.6[a]
Guidance counselor	134			11.0[d]	57.0[a]
Secondary (total)					
Agriculture	469	1.0%	0.9%	8.0	30.4
Art	1,362	3.0	2.7	12.4	21.5
Business education	2,522	5.5	5.6	10.6	26.3
Distributive education	240	0.5	0.5[e]	13.4	23.6
English language arts	9,493	20.6	21.8	13.2	26.4
Foreign language (total)	2,452	5.3	5.1	12.1	22.1
Home economics	1,823	4.0	4.1	10.7	33.0
Industrial arts	1,262	2.7	2.9	8.4	23.3
Junior high school	761	1.7	0.8[f]	12.1[f]	26.0[d]
Mathematics	5,579	12.1	12.7	11.8	23.7
Music	1,833	4.0	3.7	9.9	26.2
Physical and health education:					
Total	3,902	8.5	7.7	10.4	21.6
Men	...	...	...	12.0[h]	19.9[b]
Women	...	...	...	18.6[h]	23.0[b]
Natural and physical sciences (total)	5,056	11.0	11.3	11.6	22.7
Social studies (total)	6,034	13.1	12.4	10.6	23.3
Trade, industrial, vocational, technical	945	2.1	1.9[g]	9.9	19.4
Special education	894	1.9	1.7	7.6	36.0
Other secondary subjects	1,382	3.0	4.2[e]	9.6[e]	32.4
Total, classroom instruction .	46,009	100.0%	100.0%		
Librarian	799			6.4	39.0
Guidance counselor	627			4.4	59.3

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[a] Information reported by 20 states.
[b] Information reported by 13 states.
[c] Information reported by 17 states.
[d] Information reported by 16 states.
[e] Information reported by 15 states.
[f] Information reported by 5 states.
[g] Information reported by 14 states.
[h] Information reported by 8 states.

new teachers observed when the total number of teachers increased by 3.4 percent in elementary schools and by 4.1 percent in secondary schools. The projected growth in total number of teachers between 1967-68 and 1968-69 is estimated to be 2.5 percent in elementary schools and 4.8 percent in secondary schools. Therefore, the change in rate of staff growth expected for 1968-69 was accounted for in the projected estimate of demand by changing the numbers of total staff in each assignment who were projected to be new teachers in 1968-69 by the difference in the percent of staff growth expected overall (a reduction of 0.9 percentage points for assignments in elementary schools and an increase of 0.7 percentage points for assignments in secondary schools).

This procedure does not provide for change in the relative rate of growth among the teaching assignments. Additional information about such variation is needed to allow further correction of the projection of teacher demand.

The estimates of the percents of staff expected to be new teachers in 1968-69 were applied to both estimates of the total numbers of teachers in each assignment in 1968-69 and the resulting estimates of the demand for new teachers are listed in columns 3 and 4 of Table 16. In both of these estimates, the total demand for new teachers is less than the total demand estimated for elementary and secondary levels as a whole, listed in column 2.

TABLE 16.--SUMMARY OF THREE ADJUSTED TREND CRITERION ESTIMATES OF THE DEMAND FOR NEW TEACHERS IN 1968-69

Assignment	Projected total 1968-69 demand distributed as reported by 28 states in 1967-68	Projection of total demand based on the relation of new staff to total staff in assignment in 1967-68	
		Using total staff data from 17 states	Using estimated total staff distribution from national sampling studies
1	2	3	4
Elementary (total)	(109,300)	(106,015)	(104,616)
Regular instruction	97,824	95,656	100,315
Selected subjects			
Art	1,093	1,018	146
Foreign language	219	158	316
Music	2,404	2,134	1,004
Physical and health education.	2,404	2,161	1,163
Special education	5,356	4,888	1,672
Secondary (total)	(107,900)	(98,195)	(96,674)
Agriculture	1,079	885	1,021
Art	3,237	2,534	2,322
Business education	5,935	5,323	5,594
Distributive education	540	456	...
English language arts	22,227	20,675	24,158
Foreign languages	5,719	4,841	5,047
Home economics	4,316	3,916	4,190
Industrial arts	2,913	2,788	2,931
Junior high school	1,834	721	...
Mathematics	13,056	12,053	14,062
Music	4,316	3,455	2,865
Physical and health education:			
Men	4,223[a]	4,822[a]	6,108
Women	4,949[a]	5,629[a]	
Natural and physical sciences ...	11,869	10,673	12,343
Social sciences	14,135	11,820	13,444
Trade, industrial, vocational ...	2,266	1,854	1,517
Special education	2,050	1,617	582
Other subjects	3,236	4,004	490

a/ Projected from information reported by 8 states.

The information in column 2 of Table 16 provides an estimate which is consistent in method of calculation with those used in earlier reports of this series. The estimate in column 4 of Table 16 is used throughout the remainder of this study as an alternate estimate of the demand for new teachers in 1968-69.

Estimated Demand for Beginning Teachers

The numbers of teachers who may be expected to re-enter active employment following an interruption of at least one year influence the demand for beginning teachers. The rate of re-entry in 1968-69 in elementary- and secondary-school assignments is estimated to be 3.2 percent of all elementary-school teachers and 3.0 percent of all secondary-school teachers in 1967-68; the same rates were estimated last year. The estimated demand for beginning teachers based on an assumption that the total numbers of re-entering teachers are distributed among the assignments on the same basis as the total number of new teachers, as has been the practice in earlier studies of this series, is listed in column 3 of Table 21.

Information from 22 states reporting both the number of new teachers and the number of re-entering teachers in 1967-68 in each assignment provides the base for an alternate estimate of the demand for beginning teachers which allows for the possibility of differences among the assignments in the rate of re-entry of qualified former teachers. The low, median, high, and mean percents of new teachers who were re-entering in the states reporting are listed in Appendix Table C. The estimate listed in column 4 of Table 21 results from applying the average percent of new teachers who were re-entering (listed in column 6 of Table 15) to the estimated demand for new teachers (listed in Table 16, column 4).

Quality Criterion Estimate of the Demand for School Librarians and Guidance Counselors

The American Library Association suggests that for a given school there should be a full-time librarian for each 300 pupils up to 900; and, thereafter, one for each additional 400 pupils. With allowance for the influence of schools having various total enrollments, a general minimum estimate of the total demand for school librarians needed to meet this standard of minimum quality is projected by dividing the number of students estimated to be enrolled in fall 1968 by 350 at both the elementary and secondary levels. This provides an estimated need for 78,857 librarians in elementary schools and 49,143 librarians in secondary schools in fall 1968. Subtraction of the estimated number of librarians employed in 1967-68 (15,378 in elementary schools and 21,448 in secondary schools) provides an estimated demand in 1968 for 63,479 new librarians in elementary schools and 27,695 new librarians in secondary schools, in addition to the numbers needed to replace those normally expected to leave their positions between 1967-68 and 1968-69.

If the equivalent of one guidance counselor for each 2,000 pupils in elementary schools were used as a planning estimate for making significant progress toward attaining minimum quality in guidance services at this level, there would be a total demand for 13,800 guidance counselors in elementary schools in fall 1968. Subtraction of the estimated 3,059 persons in this assignment in 1967-68 provides an estimated demand in 1968 for 10,741 new elementary-school guidance counselors, in addition to the number needed to replace those who normally will terminate their employment in this position between 1967-68 and 1968-69.

Similarly, at the secondary level it is estimated that 43,000 guidance counselors would be needed in fall 1968 to provide one counselor per 400 students enrolled. A lower ratio of one counselor per 300 students is considered desirable for providing high-quality guidance services in secondary schools. Subtraction of the estimated 31,455 counselors estimated as being employed in secondary schools in 1967-68 provides an estimated demand for 11,545 new guidance counselors, in addition to the number needed to replace those who leave their positions, to meet this standard of minimum quality in provision of guidance counseling services in secondary schools in fall 1968.

In summary, the following new staff members will be needed, in addition to the number needed to replace persons leaving employment in these positions, to make significant progress toward the general standards of minimum quality in provision of staff for guidance and library services in fall 1968.

	Number of new persons needed in 1968 to move toward high quality in provision of staff (in addition to those needed to replace persons leaving)	
Level of assignment	School librarians	Guidance counselors
Elementary schools.	63,479	10,741
Secondary schools .	27,695	11,545
Total	91,174	22,286

TABLE 17.--INFORMATION USED TO PROJECT AN ADJUSTED TREND CRITERION ESTIMATE OF THE DEMAND FOR NEW SCHOOL LIBRARIANS AND GUIDANCE COUNSELORS, 1968-69

Type of information	School librarians			Guidance counselors		
	Elementary	Secondary	Total	Elementary	Secondary	Total
1	2	3	4	5	6	7
Information from 17 states, 1967-68						
Number of staff	4,152	6,413	10,565	826	9,405	10,231
Number of new staff	354	412	766	91	416	507
Percent of staff who are new .	8.5%	6.4%	7.3%	11.0%	4.4%	5.0%
Projected national estimate, 1967-68 a/						
Number of staff	15,378	21,448	36,826	3,059	31,455	34,514
Number of new staff	1,311	1,378	2,689	337	1,391	1,728
Projected national estimate, 1968-69						
Number of staff b/	15,762	22,478	38,240	3,135	32,965	36,100
Number of new staff c/ (demand) ..	1,198	1,596	2,794	317	1,681	1,998
Information from 20 states, 1967-68						
Average of percents of new staff who were re-entering following an interruption of at least one year	38.6%	39.0%	...	57.0%	59.3%	...
Projected national estimate, 1968-69						
Number of beginning staff (demand)	736	974	1,710	136	684	820

a/ Based on an assumption that the reporting states are representative of all states. The numbers of teachers who were employed in these states in 1967-68 were 27.0 percent of elementary-school teachers and 29.9 percent of secondary-school teachers.

b/ Based on an assumption that growth in staff size will parallel growth rate of classroom teachers.

c/ Based on an assumption that the percent of staff who were new in 1967-68 will be changed in 1968-69 by the same number of percentage points as projected in the growth in the number of classroom teachers (-0.9 in elementary and +0.7 in secondary).

Adjusted Trend Criterion Estimate of Demand for School Librarians and for Guidance Counselors

Summarized in Table 17 are several types of information used to project an estimate of the actual demand for new school librarians and guidance counselors in 1968-69. Additional information is given in Appendix Tables B and C which show the variation among the states in the conditions which are used in these estimates. This variation, along with the possibility that conditions in the reporting states are not entirely representative of the national situation and the probability of more rapid growth of staff in these assignments than among classroom teachers, suggests that the estimates be interpreted only in very general terms.

The NEA Research Division survey of salaries of school personnel in 1966-67 provided estimates of 27,520 school librarians and 27,621 guidance counselors. The projection of the numbers of persons in these positions based on information reported by the 17 states (Table 15) provides an estimate of 36,826 school librarians and 34,514 guidance counselors employed in public schools in 1967-68. The projected size of staff in 1967 summarized in Table 17 is one-third larger than the numbers of school librarians reported by the school districts and is almost one-fourth larger than the numbers of guidance counselors reported for the previous school year.

The estimated growth in the number of persons in these positions between 1967-68 and

1968-69 is based on the same rate of growth as is projected among classroom teachers. The current efforts by local school districts to improve the staff adequacy in these classifications may make this a conservative estimate of growth in staff size in 1968-69.

The average of the percents of new staff who were re-entering the profession among the 20 reporting states is relatively high; on the average almost two in five of the new school librarians and more than half the new guidance counselors were re-entering employment in education following an interruption of at least one year. The rate of re-entry into these assignments may be different from other assignments in education because several may have been classroom teachers during their previous employment; classroom teaching experience provides valuable background for effective work in these positions. As a result, persons reported as re-entering may be entering as librarians or counselors for the first time. Therefore, the estimated number of new and re-entering staff needed in 1968-69 are both listed.

In summary, it seems likely that there will be actual demand in fall 1968 for at least 2,794 new librarians, of which 1,710 may have to be drawn from the pool of persons entering the profession for the first time. There will be a demand in fall 1968 for 1,998 guidance counselors, of which 820 may need to be entering the profession for the first time.

SUPPLY COMPARED WITH DEMAND FOR NEW TEACHERS

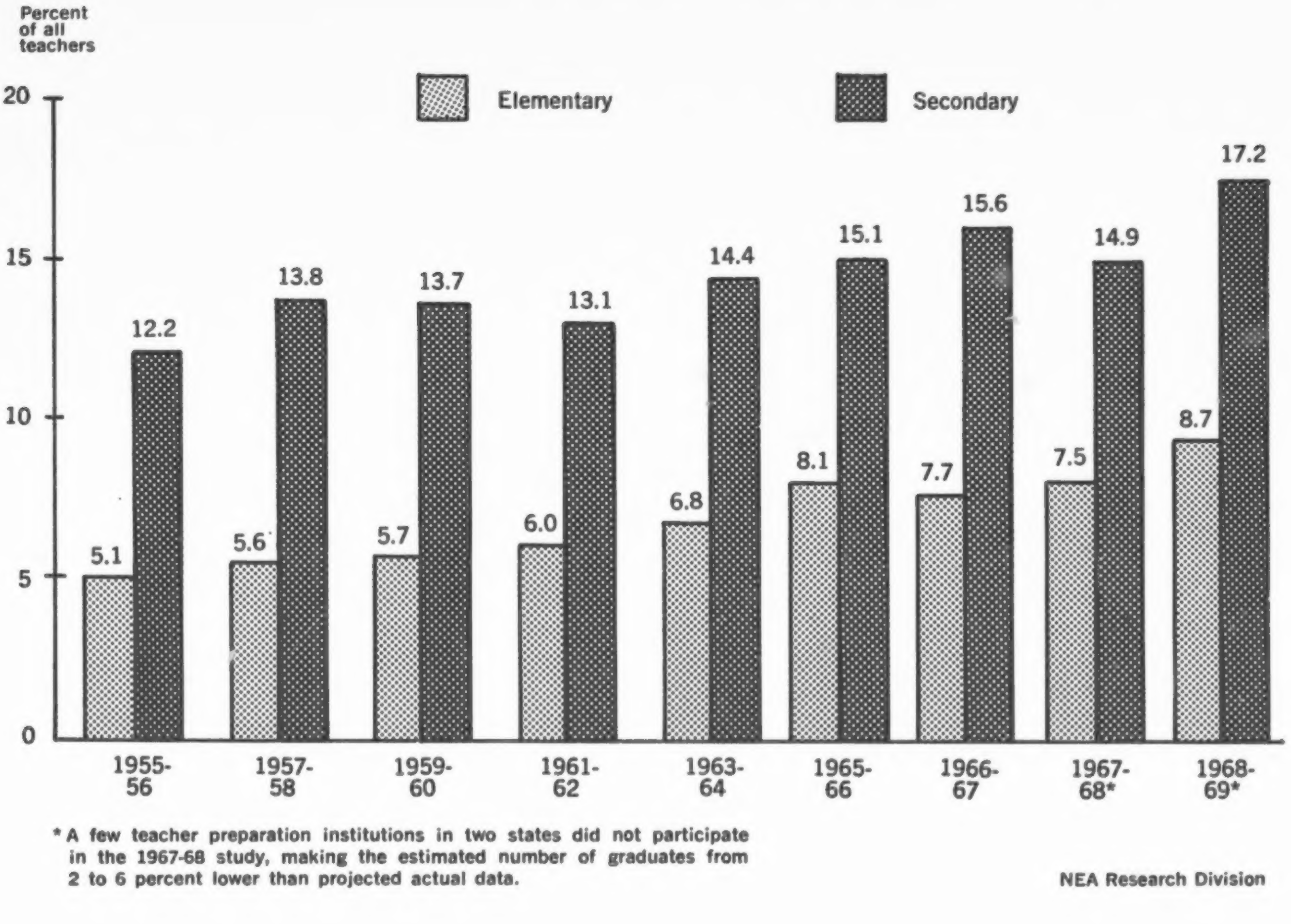
Estimates of the supply of teacher education graduates prepared to enter teaching positions in 1968 and estimates of the number of teaching positions to be filled by these graduates have been presented. A comparison of the numbers of positions included in these estimates provides a general indication of the adequacy of the present supply of beginning teachers and identifies the fields of specialization in which the estimated number of beginning teachers in supply and demand are out of balance. Also provided in this section are estimates of the status of the current supply of beginning teachers as compared with conditions in earlier years.

Supply of Graduates Compared with Demand

The number of new teachers employed and the number of graduates of teacher preparation programs in the reporting states provide an estimate of the status of the supply compared with demand based on the Adjusted Trend Criterion.

Information about the number of new teachers in 1967-68 and their assignments reported by 28 states was summarized in Table 15 in the preceding section. The total numbers of new teachers and the numbers of persons completing teacher education programs in these same 28 states in 1967 are listed in Table 18 in the same subject grouping. Caution should be used in analyzing the data contained in Table 18 since the number of prospective teachers being educated in a given state may not represent the actual supply of beginning teachers for the state because of nonresident graduates and migration of resident graduates. Also limiting the accuracy of comparisons based on these figures is the possibility that experienced former teachers may be in greater supply, or demand, in some subjects than in others. This would modify the estimated relative demand for

FIGURE III
Teacher Education Graduates as Percent of All Teachers



* A few teacher preparation institutions in two states did not participate in the 1967-68 study, making the estimated number of graduates from 2 to 6 percent lower than projected actual data.

NEA Research Division

TABLE 18.--COMPARISON OF THE TOTAL NUMBER OF TEACHER EDUCATION GRADUATES WITH THE NUMBER OF NEW TEACHERS EMPLOYED IN 27 STATES AND D.C., 1967-68

Subject 1	Total number of teacher education graduates 2	Number of new teachers employed 3	Difference 4	Number of teacher education graduates as percent of new teachers employed 5
Elementary (total)	(37,362)	(42,786)	(-5,424)	(87.3)%
Regular instruction	35,973	40,228	-4,255	89.4
Selected subjects:				
Art	410	460	-50	89.1
Foreign languages	122	90	+32	135.6
Music	498	1,006	-508	49.5
Physical and health education	359	1,002	-643	35.8
Secondary (total)	(57,488)	(45,115)	(+12,373)	(127.4)
Agriculture	1,389	469	+920	296.2
Art	1,963	1,362	+601	144.1
Business education	4,110	2,522	+1,588	163.0
Distributive education	145	240	-95	60.4
English language arts (total)	11,211	9,493	+1,718	118.1
Foreign languages (total)	3,344	2,452	+892	136.4
Home economics	3,333	1,823	+1,510	182.8
Industrial arts	1,706	1,262	+444	135.2
Junior high school (general)	170	761	-591	22.3
Mathematics	4,419	5,579	-1,160	79.2
Music	2,932	1,833	+1,099	160.0
Physical and health education	6,511	3,902	+2,609	166.9
Natural and physical sciences (total)	4,694	5,056	-362	92.8
Social sciences (total)	11,089	6,034	+5,055	183.8
Trade, industrial, vocational, technical	183	945	-762	19.4
Other	289	1,382	-1,093	20.9
Ungraded (total)	(4,166)	(4,505)	(-339)	(92.5)
Special education	1,924	3,079	-1,155	62.5
Librarian	729	799	-70	91.2
Guidance counselor	1,513	627	+886	241.3

beginning teachers to fill the positions listed as being filled by new teachers.

Table 18 shows that the areas in which the supply of beginning teachers is least adequate include elementary-school teaching, secondary-school mathematics, secondary-school sciences, and special education. If the entire class of teacher education graduates in these 27 states and the District of Columbia entered teaching, the supply of beginning teachers in these subjects would not equal the demand for new teachers. The limited information about supply and demand for assignments in junior high-school subjects, distributive education, and trade-industrial-technical subjects suggests that these have an inadequate supply. However, the limitations in the availability of data about these assignments require that the results be interpreted with caution.

Trends in Supply and Demand in Reporting States

Information in Table 19 provides an estimate of trends in supply and demand conditions as observed in the reporting states in four-year intervals since 1948-49. The table shows that the supply of qualified beginning elementary-school teachers has been rising toward, but has not reached, the numbers of new teachers employed. Mathematics, which comprises 12 percent of the new high-school teachers, also has consistently been in relatively low supply in these selected years. The sciences, involving about 11 percent of new teachers, have been in relatively short supply. English language arts, involving about 20 percent of the new high-school teachers seems to have a recent improvement in supply. Library science, involving 1 to 2 percent of the new high-school teachers, has been in relatively short supply continuously through these years studied. Industrial arts, involving about 3 percent of the new high-school teachers seems to have had a recent improvement in supply.

Supply of Beginning Teachers Compared with Total Number of Teachers Employed

An estimate of the present status of teacher supply and demand may be provided by a comparison over several years between the number of prospective teachers being graduated and the total number of teachers employed. Allowance should be made for changes in the influence of annual growth of the teaching staff and differences in the proportion of teachers leaving the profession. Normally the proportion of the total number of teachers represented by the number of graduates completing teacher education would not be expected to vary widely if the new supply is keeping pace with a steady enlargement of the demand for beginning teachers.

Shown in Table 20 are the percents of the total number of teachers represented by the number of teacher education graduates ready for entry each year since 1955-56. During these years of marked growth in the size of the total staff, the number of prospective teachers has represented a gradually increasing proportion of the total staff size. A slight moderation in this proportion occurred at the high-school level in 1961-62, a year having a marked increase in the growth of the secondary-school staff.

Supply of New Teachers Compared with Demand (QCE)

Two estimates of the supply of new teachers compared with the estimated demand for new teachers based on the Quality Criterion are shown below:

The first estimate of the supply of new teachers (past practice) uses the same assumptions about the levels of teacher re-entry and entry of teacher education graduates into the profession as described earlier. This provides an estimate of the number of new teachers who will be available for employment if general conditions remain about the same as observed last year.

The second estimate (potential supply) is based on a hypothesis that if the total QCE demand for new teachers were resulting in vacancies to be filled in the fall of 1968, the levels of re-entry of former teachers and entry of teacher education graduates may rise to higher levels than has been observed in recent years. Evidence from the years of critical shortage of teachers suggests that these changes in entry rates are not likely to occur.

The two estimates show a shortage of 257,000 to 279,000 teachers with the need being critical at the elementary-school level. It is difficult to estimate the number of qualified teachers who may be available for entry in the event that schools were financially able and had the facilities to employ the 499,650 persons estimated in the demand for new teachers. Therefore, these shortage estimates should be interpreted only in general terms.

	Number of new teachers		
	Elementary	Secondary	Total
Estimated demand (Quality Criterion)	301,300	198,350	499,650
Estimated supply (past practice)* ..	108,054	112,626	220,680
Shortage A	193,246	85,724	278,970
Estimated supply (potential)**	115,017	127,665	242,682
Shortage B	186,283	70,685	256,968

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* Re-entry of former teachers equal to 3.2 percent of the number of full-time elementary- and 3.0 percent of the number of full-time secondary-school teachers in fall 1967. Entry into teaching by 1968 graduates at the same level reported by subject in 1967. Supply in special education apportioned between elementary and secondary.

** Re-entry of former teachers as described above. Entry into teaching by 85.0 percent of teacher education graduates prepared for elementary-school teaching and by 75.0 percent of teacher education graduates prepared for high-school teaching. Supply in special education apportioned between elementary and secondary.

Supply Compared with Demand (ATCE) for Beginning Teachers

A very general estimate of the status of teacher supply and demand in 27 states in 1967

TABLE 19.--TEACHER EDUCATION GRADUATES AS PERCENT OF NEW TEACHERS EMPLOYED IN SELECTED STATES, 4-YEAR INTERVALS SINCE 1948-49

Level and subject	Percent of new teachers represented by number of teacher education graduates					
	1948-49	1952-53	1956-57	1960-61	1964-65	1967-68
1	2	3	4	5	6	7
Elementary (total)	29.7%	55.6%	48.0%	58.2%	70.3%	87.3%
Secondary-school subjects (total)	111.7	131.7	111.4	119.1	131.3	127.2
Agriculture	136.6	163.8	163.9	184.3	176.8	296.2
Art	117.1	264.5	139.5	154.4	165.4	144.1
Business education	103.0	147.1	134.2	158.5	168.7	163.0
English	95.8	105.9	73.0	73.7	95.9	118.1
Foreign languages	171.1	213.3	120.1	76.1	106.6	136.4
Home economics	114.6	137.9	128.3	141.7	170.6	182.8
Industrial arts	103.9	166.5	123.5	169.0	121.3	135.2
Journalism	103.3	82.1	78.4	59.2	93.8	a/
Library science	65.5	69.6	35.0	27.9	39.1	91.2
Mathematics	73.6	108.8	58.2	73.1	79.6	79.2
Music	105.9	164.9	127.2	174.5	171.0	160.0
Physical education--men	148.1	278.9	185.0	286.0	283.0	166.9
Physical education--women	138.6	169.6	126.3	117.0	128.7	
General science	62.3	79.4	54.8	67.8	50.7	92.8
Biology	114.8	270.9	199.3	143.3	246.2	
Chemistry	135.9	200.0	107.8	107.3	112.2	
Physics	65.1	120.1	80.2	79.3	119.0	
Social studies	157.1	207.3	164.1	153.1	186.4	183.8
Speech	126.2	313.8	256.9	260.8	469.5	a/
Other (special education, junior high school, vocational, distributive education, guidance).........	...	246.7	40.8	73.6	87.0	69.6
Number of states reporting	21	26 + Alaska Hawaii D. C.	32 + Alaska D. C.	26 + D. C.	27 + D. C.	27 + D. C.

a/ Included with English.

is provided in Tables 18 and 19. The problem of nonresident enrollments and migration has reduced the precision of estimates of the supply of beginning teachers for this group of states. If it is assumed that these 28 states are representative of the nation in the pattern of demand for new teachers among the subject fields, this pattern may be used with the national estimated demand for beginning teachers to obtain a national estimate of demand which is comparable with the national summary of the supply of beginning teachers by subject areas.

Listed in Table 21 are the estimated numbers of beginning teachers who will be available for entry into classrooms this fall, the estimated demand for beginning teachers, the difference between the estimated supply and the estimated demand for beginning teachers, and the estimated number of former teachers expected to return to classrooms in fall 1968. The estimates of demand are based on the Adjusted Trend Criterion which projects the actual number of positions to be filled in fall 1968. The differences listed in columns 5 and 6 show the adequacy of the 1967 supply of beginning teachers in each assignment. The estimates in columns 3 and 5 are based on an assumption that the average rates of teacher turnover and re-entry are equally applicable among the subject areas. In subjects in which the rate of teacher separation is about average and the re-entry rate is lower than average, the demand for beginning teachers would be greater than the level estimated. For example, the supply of qualified personnel in the pool of former teachers may not be as adequate in some subjects as in others. In the subjects having a relatively limited supply of qualified former teachers the demand for beginning teachers would be increased.

Also, changes in the general status of employment opportunities for persons having the college degree may influence the turnover and re-entry rate observed in earlier years. The increased availability of positions in other occupations and the higher economic rewards of many of these positions may increase the loss to the profession of teachers presently employed as well as former teachers who would ordinarily be considering re-entry into the profession. This general economic condition may increase the demand for beginning teachers beyond the levels estimated in both column 3 and column 4 of Table 21. The numbers of former teachers expected to re-enter classrooms in

(Continued on page 48)

TABLE 20.--ESTIMATES OF THE TOTAL NUMBER OF PUBLIC-SCHOOL TEACHERS AND THE NUMBER OF TEACHER EDUCATION GRADUATES READY FOR EMPLOYMENT EACH YEAR SINCE 1955-56

Session	Elementary			Secondary		
	Total teachers	Teacher education graduates of previous year		Total teachers	Teacher education graduates of previous year	
		Number	Percent of total		Number	Percent of total
1	2	3	4	5	6	7
1955-56	733,000	37,712	5.1%	408,000	49,697	12.2%
1956-57	751,000	40,801	5.4	447,000	56,785	12.7
1957-58	786,000	44,029	5.6	473,000	65,062	13.8
1958-59	815,000	45,318	5.3	491,000	69,093	14.1
1959-60	832,000	47,836	5.7	524,000	71,585	13.7
1960-61	858,000	52,630	6.1	550,000	77,573	14.1
1961-62	869,000	51,866	6.0	592,000	77,322	13.1
1962-63	886,000	57,854	6.5	621,000	84,489	13.6
1963-64	908,000	61,979	6.8	669,000	96,378	14.4
1964-65	940,000	72,581	7.7	708,000	101,552	14.3
1965-66	965,000	77,773	8.1	746,000	112,436	15.1
1966-67	1,005,000	77,703[a]	7.7	783,000	122,208[a]	15.6
1967-68	1,027,000	76,607[b]	7.5	816,000	121,554[a][b]	14.9
1968-69 (estimate)	1,039,000	89,941[a][b]	8.6	853,000	146,511[a][b]	17.2

Source of staff size: U. S. Department of Health, Education, and Welfare, Office of Education. Projections of Educational Statistics to 1976-77. Washington, D. C.: Government Printing Office, 1968. Table 23. (Fall staff size includes number of part-time teachers.)

[a] Persons prepared to teach specific subjects, librarians, and guidance counselors are classified as secondary, consistent with practice in earlier years. Persons prepared to enter employment as school psychologists, school social workers, school nurses, and other ungraded assignments are not included.

[b] Estimate may be from 2 to 6 percent lower than actual numbers owing to incomplete reports in two states.

FIGURE IV

Supply and Demand for Beginning Teachers, by Type of Assignment, Adjusted Trend Criterion Estimate, 1968

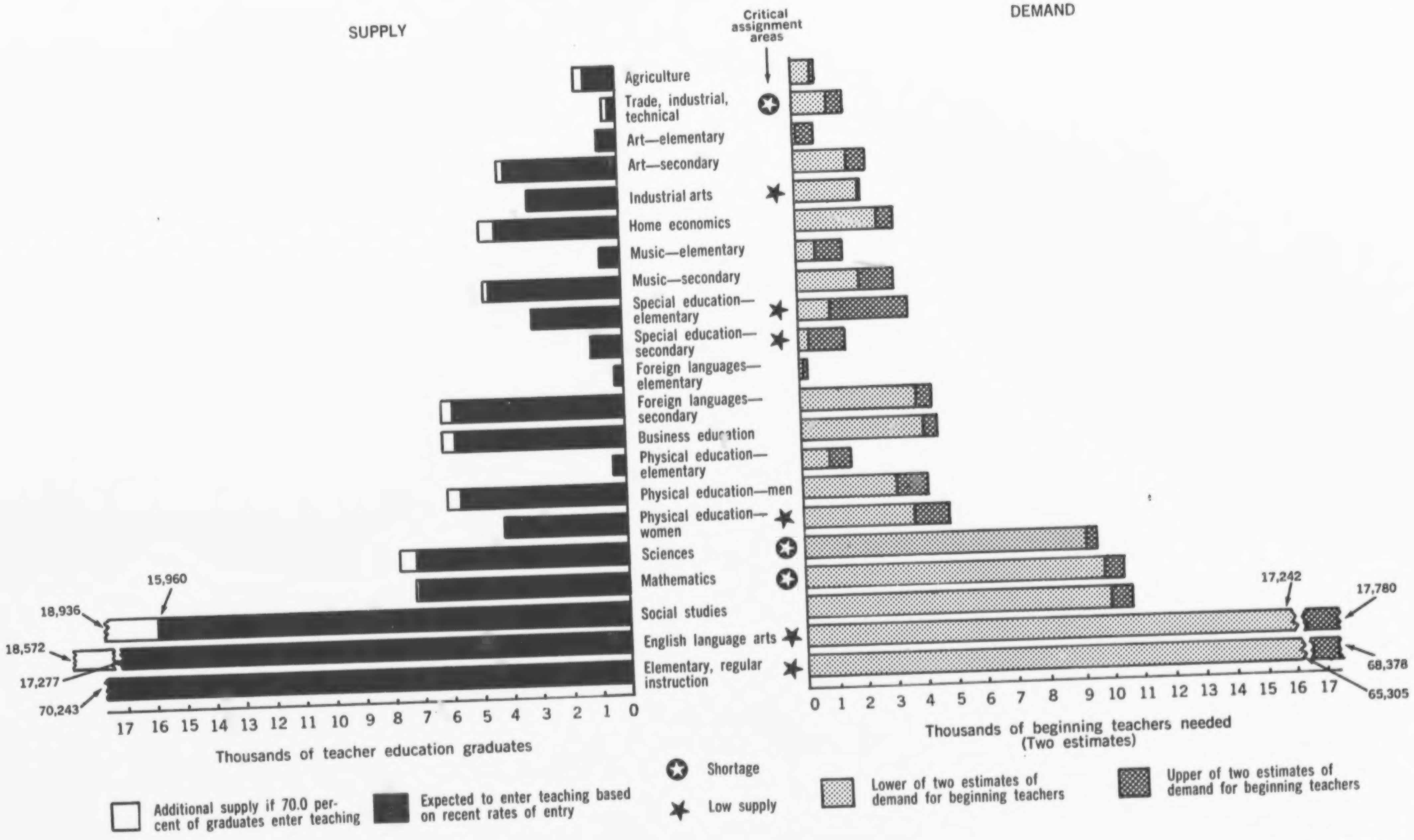

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TABLE 21.--COMPARISON OF THE ESTIMATED SUPPLY OF BEGINNING TEACHERS WITH THE ADJUSTED TREND CRITERION ESTIMATE OF DEMAND FOR BEGINNING TEACHERS AND FOR NEW TEACHERS IN 1968, BY ASSIGNMENT

Assignment	Estimated supply of beginning teachers	Estimated demand for beginning teachers		Difference between supply and demand for beginning teachers		Number of former teachers expected to re-enter classrooms	
		Distribution last year	Estimated national distribution	Distribution last year	Estimated national distribution	Distribution last year	Estimated national distribution
1	2	3	4	5	6	7	8
Elementary (total)	(75,154)	(76,400)	(68,466)	(-1,246)	(+6,688)	(32,900)	(36,150)
Regular instruction.	70,243	68,378	65,305	+1,865	+4,938	29,446	35,010
Selected subjects:							
Art	589	764	120	-175	+469	329	26
Foreign language .	258	153	260	+105	-2	66	56
Music	639	1,681	707	-1,042	-68	723	297
Physical and health education	425	1,681	929	-1,256	-504	723	234
Special education.	3,000a/	3,743	1,145	-743	+1,855	1,613	527
Secondary (total)	(88,426)	(83,700)	(72,835)	(+4,726)	(+15,591)	(24,200)	(23,839)
Agriculture	1,170	837	711	+333	+459	242	310
Art	3,840	2,511	1,823	+1,329	+2,017	726	499
Business education .	5,715	4,604	4,123	+1,111	+1,592	1,331	1,471
Distributive education	245	419	...	-174	...	121	...
English language arts	17,277	17,242	17,780	+35	-503	4,985	6,378
Foreign language ...	5,839	4,436	3,932	+1,403	+1,907	1,283	1,115
Home economics	4,298	3,348	2,807	+950	+1,491	968	1,383
Industrial arts	3,049	2,260	2,248	+789	+801	653	683
Junior high school .	621	1,423	...	-802	...	411	...
Mathematics	7,151	10,128	10,729	-2,977	-3,578	2,928	3,333
Music	4,477	3,348	2,114	+1,129	+2,363	968	751
Physical and health education--men	5,605	3,276	4,789	+2,329	+5,033	947	1,319
Physical and health education--women	4,217	3,839		+378		1,110	
Natural and physical sciences	7,174	9,207	9,541	-2,033	-2,367	2,662	2,802
Social studies	15,960	10,965	10,312	+4,995	+5,648	3,170	3,132
Trade, industrial, vocational, technical	269	1,758	1,223	-1,489	-954	508	294
Special education ..	1,106a/	1,590	372	-484	+734	460	210
Other subjects	413	2,509	331	-2,096	+82	727	159

NOTE: Estimated supply is from Table 9; estimated demand, from Table 16.

a/ Estimated supply was reported as an ungraded assignment. The total number expected to enter teaching in elementary schools was arbitrarily assigned.

TABLE 22.--SUMMARY OF ESTIMATED SUPPLY COMPARED WITH THE ADJUSTED TREND CRITERION ESTIMATE OF DEMAND FOR BEGINNING TEACHERS IN 1968, ELEMENTARY-SCHOOL AND SECONDARY-SCHOOL SUBJECT AREAS, BY RANK

Assignment	Numerical difference in the estimated supply of beginning teachers and estimated demand based on		Percent of teacher education graduates entering the profession	Estimated additional supply if 70.0 percent of graduates entered	Additional demand if estimated re-entry rate is reduced by 10%	General condition
	Percent distribution in 1967	National estimate				
1	2	3	4	5	6	7
Mathematics	-2,977	-3,578	69.1%	93	-293	Critical shortage
Natural and physical sciences	-2,033	-2,367	63.1	780	-266	Critical shortage
Trade, industrial, vocational, technical.	-1,489	-954	44.2	157	-51	Shortage
Special education						
Elementary	-743	+1,855	71.9	...	-161	Low supply
Secondary	-484	+734	71.9	...	-46	Low supply
Industrial arts	+789	+801	70.3	...	-65	Low supply
Elementary, regular instruction	+1,865	+4,438	78.1	...	-2,945	Low supply
English language arts.	+35	-503	65.1	1,294	-498	Low supply
Distributive education	-174	...	51.6	87	-12	Low supply
Junior high-school subjects	-802	...	80.7	...	-41	Possible shortage[a]
Physical and health education						
Elementary	-1,258	-504	69.8	1	-72	Possible shortage[a]
Secondary (total) ..	+2,707	+5,033	67.6	349	-206	Adequate supply
Men	+2,329	...	63.5	583	-95	Adequate supply
Women	+378	...	74.2	...	-111	Low supply
Agriculture	+333	+459	57.2	262	-24	Near balance[a]
Home economics	+950	+1,491	63.4	447	-97	Near balance[a]
Art						
Elementary	-175	+469	67.5	21	-33	Near balance[a]
Secondary	+1,329	+2,017	66.2	220	-73	Near balance
Business education ...	+1,111	+1,592	63.5	585	-133	Near balance
Music						
Elementary	-1,042	-68	76.0	...	-72	Possible shortage[a]
Secondary	+1,129	+2,363	67.5	166	-97	Adequate supply
Foreign languages						
Elementary	+105	-2	75.6	...	-7	Near balance[a]
Secondary	+1,403	+1,907	64.7	478	-128	Adequate supply
Social studies	+4,995	+5,648	59.0	2,976	-317	Adequate supply

[a] Information is not sufficiently complete to allow an accurate estimate of the supply-demand condition.

fall 1968 following an interruption of at least one year are listed in columns 7 and 8 of Table 21. These show the estimated additional numbers of beginning teachers which would be needed if no former teachers re-entered classrooms in fall 1968.

The range of error in the information and in the assumptions leading to these estimates of supply and demand for beginning teachers requires that the numerical data be interpreted only in general terms. Therefore, the numerical differences provide only an indication of the comparative impact of supply and demand conditions in the various subject areas.

A summary of the ranked placement of the subject areas of teacher preparation in terms of the estimated condition of the supply and demand for beginning teachers is given in Table 22. The estimate of general condition is based on a combination of the information listed in columns 2 through 6.

The numerical differences between the estimated supply and the two estimates of the demand for beginning teachers (columns 2 and 3) show the condition of each assignment if the factors related to supply and demand operate as reported in 27 states and the District of Columbia last year. The enlargement, rate of teacher turnover, and extent of re-entry of staff were influenced by some shortages in 1967 as well as continuation of the chronic shortages of qualified persons in several assignments. Possibly the pattern of the numbers of new teachers in the assignments would have been different if the supply of beginning teachers were more than adequate for each assignment.

The percent of qualified graduates entering the profession last year (column 4) provides an indication of the possible availability of qualified persons from earlier graduating classes. The size of these pools of qualified beginning teachers may be least adequate in the subject areas having the highest proportions of graduates entering the profession immediately subsequent to their graduation. For example, since a relatively high proportion (78.1 percent) of graduates prepared to teach elementary-school classes typically enter the

FIGURE V
Estimates of Supply of Teacher Education Graduates Expected To Enter Teaching and Demand for Beginning Teachers, 1968-69

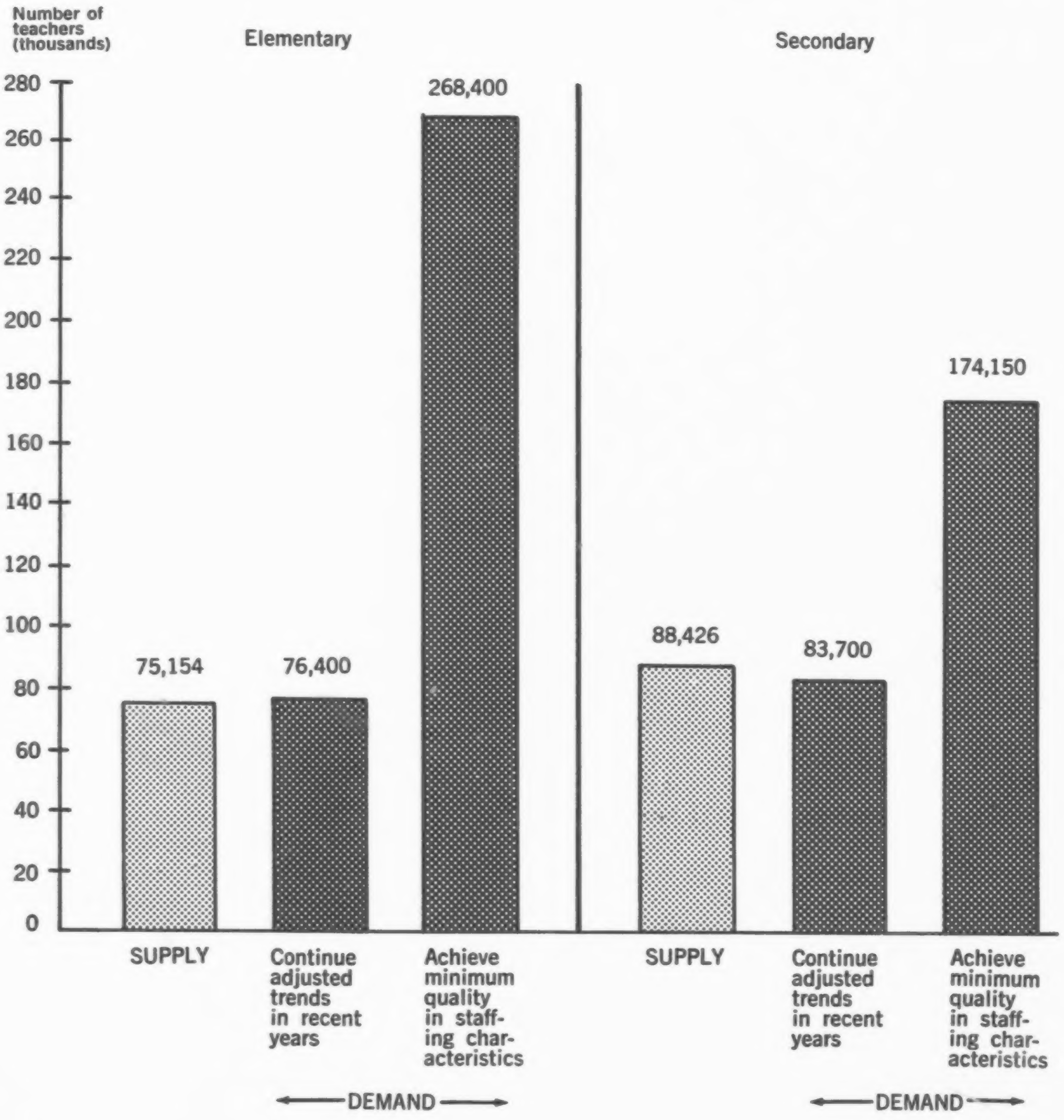

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TABLE 23.--SUMMARY OF THE COMPARISONS OF ESTIMATED SUPPLY WITH THE ESTIMATES OF DEMAND FOR BEGINNING TEACHERS, 1968-69

Level and criterion for estimate 1	Supply of beginning teachers 2	Demand for beginning teachers 3	Difference 4	Supply as percent of demand 5
Elementary school				
Adjusted Trend Criterion				
Distribution of new teachers last year	75,154	76,400	-1,246	98.4%
Estimated national distribution ...	75,154	68,466	+6,688	109.8
Quality criterion	75,154	268,400	-193,246	28.0
Secondary school				
Adjusted Trend Criterion				
Distribution of new teachers last year	88,426	83,700	+4,726	105.6
Estimated national distribution ...	88,426	72,835	+15,591	121.4
Quality criterion	88,426	174,150	-85,724	50.8
Total				
Adjusted Trend Criterion				
Distribution of new teachers last year	163,580	160,100	+3,480	102.2
Estimated national distribution ...	163,580	141,301	+22,279	115.8
Quality criterion	163,580	442,550	-278,970	37.0

profession immediately following their graduation, little growth would be expected in the pool of potential beginning teachers from recent graduating classes. At the other extreme, annual enlargement of a pool of qualified potential beginning teachers is likely in agriculture where about three-fifths of the graduates typically enter the profession immediately following graduation.

The additional supply of beginning teachers from the 1968 graduating class if 70.0 percent of the graduates enter teaching (column 5) shows an estimate of the potential supply which may be tapped, if needed. The rate projected, 70.0 percent, is slightly lower than the average reported for all teacher education graduates in recent years; it is assumed that this rate may be attained among graduates prepared for any assignment if employment opportunities are available and attractive. This assumption may be unrealistic when applied to certain multi-subject assignment areas, such as the sciences, in which the supply is typically more adequate in one component subject, such as biology, than in the other component subjects.

The information in column 6 shows the additional demand for beginning teachers which could result from a small change in the estimated re-entry rate of former teachers. The reduction of 10 percent in the estimated re-entry rate would deepen the shortage of beginning elementary-school teachers by almost 3,000 persons. This and the relatively small numbers involved in the other assignments provide a basis for interpreting the significance of the estimated numerical comparison of the supply and demand for beginning teachers. The estimate in column 6 is related to the numerical estimate in column 2 in that both are based on the assumption that the rate of re-entry of former teachers is the same for each teaching assignment.

The summary in column 7 of Table 22 shows that based on the Adjusted Trend Criterion Estimate of demand the shortage of new teachers is continuing in mathematics and in the total natural and physical sciences. Limited supply compared with demand is estimated in trade-industrial-vocational-technical subjects, special education, industrial arts, elementary-school instruction, women teachers of physical and health education, and English language arts. Comparisons based on limited information suggest that the supply of beginning teachers is not as large as needed in distributive education, subject-area assignments in elementary schools, and in junior high-school subjects. Local shortages may be observed in specific foreign languages despite the near-balance between supply and demand estimated for beginning teachers in this field as a whole.

The estimates of conditions shown in Table 22 are based on a continuation of gradual movement in the improvement in educational staffing toward the standards described in the Quality Criterion Estimate. Acceleration of movement toward improved quality will increase the demand for beginning teachers.

Summary of Comparisons Between Estimates of Teacher Supply and Demand

Table 23 summarizes the comparisons between the estimated supply of beginning teachers and the three estimates of demand for beginning teachers. The estimated supply of beginning elementary-school teachers is lower than two of the three estimates of demand. The estimated total supply of beginning secondary-school teachers is greater than the two estimates of the demand projected by the Adjusted Trend Criterion Estimate but is inadequate to meet the requirements of the Quality Criterion Estimate. However, shortages are estimated in mathematics and in the sciences. Low supply is estimated in special education, vocational-technical courses, women's physical education, industrial arts, and in elementary-school instruction. Intensification of shortages estimated in these fields and creation of shortages in others may result from acceleration in progress toward improved quality in educational staffing.

Supply Compared with Demand for School Librarians and Guidance Counselors

The estimated supplies of beginning school librarians and guidance counselors were listed in Table 7. The Quality Criterion Estimate of demand and the Adjusted Trend Criterion Estimate of demand for new persons in these assignments were reviewed. The following provides a summary and comparison of these estimates:

	Number of staff	
	School librarians	Guidance counselors
Estimated supply of beginning staff in fall 1968*	1,068	1,832
Quality Criterion Estimate of demand, exclusive of the number needed to replace those who leave		
For new staff	91,174	22,286
For beginning staff	90,090	21,108
Differences	-89,022 to -90,106	-19,276 to -20,454
Adjusted Trend Criterion Estimate of demand in 1968		
For new staff	2,794	1,998
For beginning staff	1,710	820
Differences	-642 to -1,726	-166 to +1,012

---

*Based on entry of 56.5 percent of persons completing preparation to become school librarians and 53.6 percent of persons completing preparation to become guidance counselors.

These estimates show that the supply of beginning staff for these positions is far below the numbers needed to attain minimum quality in this phase of educational staffing. Compared with the projected number of positions to be filled by either beginning or re-entering staff, it is estimated that the supply of beginning librarians expected to enter the profession will be inadequate by 600 to 1,700 persons. The estimated supply of beginning guidance counselors seems to be adequate for the projected demand for them in fall 1968.

EDUCATION COMPLETED BY PUBLIC-SCHOOL TEACHERS

The completion of a bachelor's degree with an emphasis on preparation for teaching has been widely accepted as a minimum educational requirement for becoming an effective teacher. The completion of a master's degree is increasingly being used as the minimum level of educational preparation to be expected among persons considered to be fully qualified teachers. This section reviews the status and trends in the accomplishment of these two levels of academic preparation among public-school teachers. Also shown is information from the states which reported information about the highest level of education completed by their new teachers and by the entire teaching staffs of their public elementary and secondary schools.

Trends in Academic Preparation Completed

Estimated distributions of public-school teachers by their highest earned degree as established in eight national sampling surveys are given in Table 24. The 1955-56 survey contained a slightly higher than representative percent of NEA members which may have introduced a slight bias toward higher preparation. During the past 10 years, marked improvement is noted in the proportions of elementary-school teachers who have completed at least the bachelor's degree. However, the pace of this trend was reduced between 1965-66 and 1966-67; possibly this is an outcome of the unusual shortages reported in fall 1966. At the secondary-school level near the end of this 10-year period there has been improvement in the proportion of public-school teachers who have earned the master's degree.

Differences Among the States

Among the 31 states and the District of Columbia reporting information for 1967-68, marked differences are observed in the proportion of elementary-school teachers who have completed the bachelor's degree, shown in Table 25. Eleven of these political subdivisions report that more than 10 percent do not have the bachelor's degree; in two of these states more than one-third have not completed the bachelor's degree.

FIGURE VI
Estimated National Distribution of Public-School Teachers by Their Highest Level of Academic Preparation, 1967-68

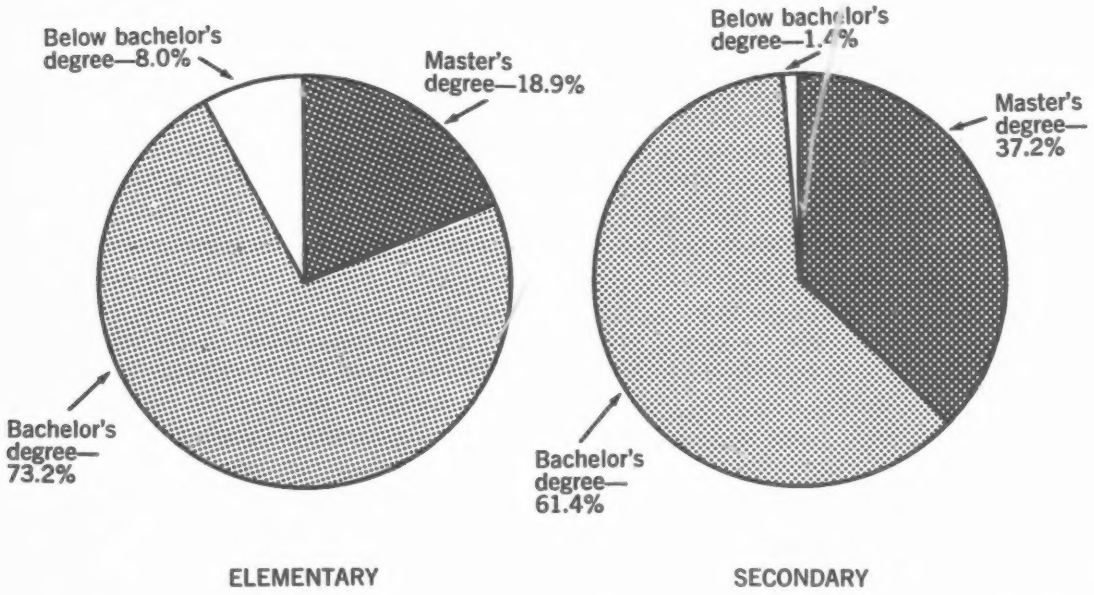

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TABLE 24.--DISTRIBUTION OF PUBLIC-SCHOOL TEACHERS BY HIGHEST DEGREE EARNED, SELECTED YEARS

School year	All teachers			Elementary-school teachers			Secondary-school teachers		
	No degree	Bachelor's degree	Master's or higher degree	No degree	Bachelor's degree	Master's or higher degree	No degree	Bachelor's degree	Master's or higher degree
1	2	3	4	5	6	7	8	9	10
1930-31 ...	70.0%	(—— 30.0% ——)		...	...	...	...	...	...
1947-48 ...	40.6	43.3%	15.1%	...	...	...	...	...	...
1955-56 ...	22.2	53.2	24.6	34.1%	53.1%	12.8%	3.0%	53.3%	43.7%
1960-61 ...	14.6	61.9	23.5	23.8	62.2	14.0	2.3	61.6	36.1
1962-63 ...	10.9	64.5	24.6	17.6	65.0	17.4	1.9	63.9	34.2
1964-65 ...	8.6	67.3	24.1	15.1	70.8	14.1	1.7	63.5	34.8
1965-66 ...	6.6	67.2	26.2	10.9	70.9	18.2	2.1	63.2	34.7
1966-67 ...	6.1	68.2	25.7	10.3	72.9	16.8	1.5	63.0	35.5
1967-68 ...	4.7	67.4	27.9	8.0	73.2	18.9	1.4	61.4	37.2

Sources:

1930-31: Evenden, E. S. National Survey of the Education of Teachers: Summary and Interpretation. U.S. Department of the Interior, Office of Education, Bulletin 1933, No. 10, Vol. VI. Washington, D.C.: Government Printing Office, 1935.

1947-48: National Education Association, Research Division. "Teachers in the Public Schools." Research Bulletin 27: 133; December 1949.

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1960-61: National Education Association, Research Division. The American Public-School Teacher, 1960-61. Research Monograph 1963-M2. Washington, D.C.: the Association, April 1963. p. 91.

1962-63, 1964-65, 1965-66, 1966-67, and 1967-68: National Education Association, Research Division, unpublished status information obtained from periodic sampling surveys.

Wide differences are noted among the 31 reporting states in the proportion of elementary-school teachers who have completed the master's degree, also shown in Table 25. Three of these states report that more than one-fourth have the master's degree. On the other hand, in eight states less than 10 percent have completed the master's degree. Only four states report more than 1 percent having completed less than two years of college preparation.

Information about the preparation level of secondary-school teachers by states is shown also in Table 25. In one of the 31 reporting states all have the bachelor's or higher degree, and in seven additional states the small numbers lacking this level of preparation represent fewer than 1 percent of the number of secondary-school teachers. At the other extreme, in two states and the District of Columbia more than 1 percent have not completed two years of college preparation.

The percents of secondary-school teachers having at least the master's degree range from 14.2 to 59.6. In one of the 31 reporting states, more than half have completed at least the master's degree. On the other hand, in 10 of these states less than one-fourth have completed this level of preparation.

Preparation of New Teachers

The level of preparation completed by teachers entering or re-entering full-time employment provides an indication of the extent school systems are able to find fully qualified persons to fill vacated or new positions. An inadequate supply of qualified teachers or limited attraction of employment in education for qualified personnel may be reflected in the employment of persons having below-average or substandard qualifications. The comparison of the educational qualifications of new teachers with those of the total number of teachers in service provides an indication of whether the persons being employed are raising or lowering the quality of the total staff.

Table 26 shows the percents of new teachers in elementary and secondary schools who have completed selected levels of preparation in each of the 28 states and the District of Columbia reporting. In only five states does the percent of new elementary-school teachers having the master's degree exceed 10 percent of all new elementary-school teachers. At the secondary-school level, possession of the master's degree by more than 10 percent of the new teachers is reported by 15 of the 29 states.

At the other extreme in adequacy of preparation, the percent of new elementary-school teachers having less than two years of college preparation exceeded 3 percent in 4 of the 28 states and the District of Columbia reporting this information. The percent of new secondary-school teachers having less than two years of college preparation exceeded 1 percent in 4 of the 28 states and the District of Columbia reporting this information.

Comparison of information in Tables 25 and 26 for individual states reporting the educational

TABLE 25.--PERCENT OF ALL ELEMENTARY- AND ALL SECONDARY-SCHOOL TEACHERS, IN 31 STATES AND DISTRICT OF COLUMBIA HAVING MASTER'S DEGREE, BACHELOR'S OR HIGHER DEGREE, AND LESS THAN TWO YEARS, 1967-68

State	All elementary-school teachers					All secondary-school teachers				
	Master's or higher degree		Bachelor's or higher degree		Less than 2 years' college	Master's or higher degree		Bachelor's or higher degree		Less than 2 years' college
	Percent	Rank	Percent	Rank		Percent	Rank	Percent	Rank	
1	2	3	4	5	6	7	8	9	10	11
Alabama	14.8%	12	92.2%	19	1.8%	24.8%	22	97.9%	20.5	0.3%
Arkansas	13.4	15.5	95.4	14	...	26.3	20.5	98.5	15	...
Colorado	16.0	11	98.4	3	0.1	32.3	11	99.5	5	0.2
Connecticut	19.2	6.5	96.6	8.5	0.5	36.5	6	99.6	3.5	0.1
Delaware	16.4	10	94.8	15	...	32.4	9.5	94.5	30	...
District of Columbia	14.2	13	96.4	10	1.0	32.9	8	97.6	24	1.4
Florida	22.1	5	98.1	4	1.1	29.7	15	98.4	17.5	1.4
Georgia	11.2	22	97.1	7	...	32.0	13	100.0	1	...
Hawaii	9.0	26	97.4	6	...	17.9	28	99.0	9	...
Idaho	10.8	23	75.7	30	0.2	32.2	12	95.8	29	0.1
Iowa	6.7	28	78.0	29	a/	16.3	30	98.9	11	a/
Kansas	36.9	1	92.9	16.5	1.0	59.6	1	96.8	25	2.3
Kentucky	10.2	24	92.4	18	...	b/	...	b/	...	b/
Louisiana	17.5	9	92.9	16.5	0.7	30.1	14	98.5	15	0.2
Maryland	11.9	21	85.0	23	3.1	24.0	23	96.3	26	1.0
Massachusetts	23.8	4	87.0	22	a/	39.6	3	94.0	31	a/
Missouri[c]	19.1	8	96.1	11	...	42.0	2	98.5	15	0.6
Nebraska	3.4	32	63.6	31	2.1	17.2	29	99.0	9	0.2
Nevada	12.9	19	90.1	21	...	29.1	17	98.0	19	...
New Mexico	25.5	3	99.6	1	*	37.9	4	99.3	7	0.3
North Carolina	19.2	6.5	96.0	12.5	0.2	19.2	25	96.0	27	...
North Dakota	3.6	31	49.4	32	0.3	14.2	31	99.9	2	...
Oregon	13.4	15.5	92.0	20	a/	36.1	5	99.0	9	a/
Pennsylvania[d]	14.0	14	78.2	28	0.3	29.2	16	97.7	23	0.5
Tennessee	13.2	17	82.7	27	0.8	28.6	18	98.4	17.5	0.2
Texas	28.2	2	97.7	5	a/	33.1	7	98.7	12	a/
Utah	6.2	30	96.6	8.5	...	18.2	27	98.6	13	...
Virginia	7.7	27	84.9	24	a/	19.0	26	97.9	20.5	a/
Washington	13.0	18	96.0	12.5	a/	32.4	9.5	99.4	6	a/
West Virginia	12.6	20	83.5	26	0.8	27.6	19	97.8	22	*
Wisconsin	9.8	25	84.8	25	0.2	26.3	20.5	95.9	28	0.1
Wyoming	6.4	29	98.5	2	0.3	22.9	24	99.6	3.5	...

* Less than 1/10 of 1 percent.

a/ Data not available in this classification.

b/ Data not available.

c/ Data are for 1966-67.

d/ Data are not available for 1966 teachers.

TABLE 26.--PERCENT OF NEW ELEMENTARY- AND NEW SECONDARY-SCHOOL TEACHERS HAVING MASTER'S DEGREE, BACHELOR'S OR HIGHER DEGREE, AND LESS THAN TWO YEARS, 1967-68, IN 28 STATES AND THE DISTRICT OF COLUMBIA

State	New elementary-school teachers					New secondary-school teachers				
	Master's or higher degree		Bachelor's or higher degree		Less than 2 year's college	Master's or higher degree		Bachelor's or higher degree		Less than 2 year's college
	Percent	Rank	Percent	Rank		Percent	Rank	Percent	Rank	
1	2	3	4	5	6	7	8	9	10	11
Alabama	4.9%	17.5	89.1%	22	2.3%	7.8%	17.5	94.1%	24.5	1.0%
Arkansas	5.4	16	93.1	18	...	6.2	21	97.3	14	...
Colorado	9.0	9	98.3	7	...	12.1	13	98.5	6	0.3
Connecticut	9.8	6	99.2	5	0.2	23.0	3	100.0	2.5	...
Delaware	7.9	12	97.3	8	...	10.4	15	83.6	28	...
District of Columbia.	6.2	15	99.1	6	0.3	14.8	9	97.6	13	1.2
Florida	10.6	4	94.1	14.5	3.8	15.3	8	94.9	21	4.0
Hawaii	9.3	8	99.4	2.5	...	19.7	4	98.1	10	...
Idaho	9.5	7	75.3	26	0.2	23.4	2	94.8	22	0.3
Iowa	...	29	100.0	1	...	...	29	100.0	2.5	...
Kansas	17.8	2	96.3	10	0.8	23.9	1	100.0	2.5	...
Louisiana	3.9	20.5	87.4	23	3.4	7.5	19	96.2	16.5	0.5
Maryland	8.3	11	86.9	24	a/	12.9	11.5	94.3	23	1.7
Missouri b/	2.4	23.5	94.1	14.5	...	6.0	22	95.5	20	1.8
Nebraska	2.3	25	68.3	28	3.5	4.0	23	97.8	12	0.4
Nevada	10.5	5	92.9	19	...	15.5	7	96.2	16.5	...
New Mexico	11.1	3	99.4	2.5	...	12.9	11.5	98.7	7	0.7
North Carolina	19.2	1	96.0	11	...	19.2	5	96.0	19	...
North Dakota	2.6	22	66.8	29	1.7	3.8	24	100.0	2.5	...
Oregon	4.2	19	91.5	20	a/	14.0	10	98.2	8.5	a/
Pennsylvania c/	6.5	14	97.2	9	...	9.8	16	96.1	18	1.0
Tennessee	1.0	28	79.1	25	3.8	3.4	27	94.1	24.5	0.4
Texas	1.5	27	89.7	21	a/	3.0	28	93.3	26	a/
Utah	3.9	20.5	93.7	16	...	7.8	17.5	98.2	8.5	...
Virginia	4.9	17.5	93.2	17	a/	10.6	14	97.2	15	a/
Washington	7.6	13	95.8	12	a/	19.0	6	98.0	11	a/
West Virginia	2.4	23.5	73.3	27	1.5	6.6	20	91.7	27	...
Wisconsin	8.9	10	95.5	13	0.3	3.5	25.5	81.3	29	0.1
Wyoming	2.2	26	99.3	4	...	3.5	25.5	99.5	5	...

a/ Data not available in this classification.
b/ Data are for 1966-67.
c/ Data are not available for 1966 teachers.

qualifications of new and all teachers provides an indication of the influence of the educational qualifications of new teachers upon the qualifications of the total staff in these states.

The quality of the total staff is likely to have been improved where the percent of new teachers having the bachelor's or higher degree is at least 3.0 percentage points more than the percent of all teachers having this level of preparation. This improvement at the elementary-school level is observed in 7 of the 28 states providing information about new and all elementary-school teachers: Iowa, Kansas, Nebraska, North Dakota, Pennsylvania, Virginia, and Wisconsin. Similar improvement is observed at the secondary-school level in 2 of the 28 states providing information about new and all secondary-school teachers: Iowa and Kansas.

The quality of the total staff is likely to have not been improved where the percent of new teachers having the bachelor's or higher degree is at least 3.0 percentage points lower than the percent of all teachers having this level of preparation. This lowering of staff quality at the elementary-school level is observed in 6 of the 28 states providing information about new and all elementary-school teachers: Alabama, Florida, Louisiana, Tennessee, Texas, and West Virginia. Similar lowering of quality is suggested in 8 of the 28 states providing information about new and all secondary-school teachers: Alabama, Delaware, Florida, Missouri, Tennessee, Texas, West Virginia, and Wisconsin.

APPENDIX

Table A.--Number of Students Completing Preparation for Standard Teaching Certificates, by Type of Preparation, Year, and State 57

Table B.--Low, Median, High, and Mean Percents of Teachers Who Were New in 16 States and District of Columbia, 1967-68 74

Table C.--Low, Median, High, and Mean Percents of New Teachers Who Were Re-entering Classrooms Following an Interruption of at Least One Year, in 21 States and District of Columbia, 1967-68 75

Table D.--Responses to the Special Survey of Teacher Supply and Demand in Summer 1968, by State 76

Table E.--State Authorities Who are Major Contributors to the Study 77

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE

TYPE OF PREPARATION COMPLETED BY STUDENT	ALABAMA		ALASKA		ARIZONA	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	1,311	1,175	27	21	1,326	1,335
REGULAR INSTRUCTION	1,301	1,173	27	21	1,320	1,334
SELECTED SUBJECTS(TOTAL)	10	2	...	...	6	1
ART	3	1	...	...	...	...
FOREIGN LANGUAGES	...	...	...	...	...	...
MUSIC	7	1	...	...	1	...
PHYSICAL & HEALTH EDUCATION	...	...	...	...	5	1
SECONDARY SCHOOL						
AGRICULTURE	81	82	...	...	...	11
ART	46	28	3	1	95	51
BUSINESS EDUCATION	257	194	1	1	132	103
DISTRIBUTIVE EDUCATION	...	3	...	...	9	3
ENGLISH LANGUAGE ARTS(TOTAL)	492	433	8	7	313	265
ENGLISH	440	399	8	6	266	226
JOURNALISM	...	...	...	...	7	6
SPEECH AND DRAMATIC ARTS	52	34	...	1	40	33
FOREIGN LANGUAGES(TOTAL)	71	49	3	2	121	109
FRENCH	31	17	1	1	8	13
GERMAN	3	5	1	1	8	7
LATIN	1	3	...	...	...	...
RUSSIAN	...	...	...	...	4	3
SPANISH	36	24	1	...	99	86
OTHER	...	...	...	...	2	...
HOME ECONOMICS	193	134	2	3	85	91
INDUSTRIAL ARTS	53	35	...	...	76	57
JUNIOR HIGH SCHOOL(GENERAL)	...	...	...	...	...	...
MATHEMATICS	223	197	5	2	68	79
MUSIC	128	82	1	2	60	62
PHYSICAL & HEALTH EDUCATION	393	275	4	4	217	173
NATURAL & PHYSICAL SCIENCES (TOTAL)	253	213	5	5	124	94
SUBJECT NOT SPECIFIED	1	9	...	...	39	36
GENERAL SCIENCE	65	61	...	2	14	8
BIOLOGY	161	125	4	2	52	40
CHEMISTRY	26	18	1	...	11	6
PHYSICS	...	...	...	1	8	4
SOCIAL STUDIES(TOTAL)	621	493	6	6	260	213
SUBJECT NOT SPECIFIED	231	198	1	...	51	39
HISTORY, GEOGRAPHY	344	222	5	6	119	116
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	31	52	...	...	...	...
OTHER SOCIAL STUDIES	15	21	...	...	90	58
TRADE, INDUSTRY, TECHNOLOGY	4	9	...	...	10	2
OTHER SECONDARY SUBJECTS	78	79	...	...	40	89
SECONDARY-SCHOOL TOTAL	2,893	2,306	38	33	1,610	1,402
UNGRADED						
SPECIAL EDUCATION	8	8	...	...	126	126
LIBRARIAN	20	24	...	...	35	16
GUIDANCE COUNSELOR	62	40	...	...	227	141
SCHOOL PSYCHOLOGIST	18	16	...	...	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	63	69	...	...	48	35

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	ARKANSAS		CALIFORNIA		COLORADO	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	934	772	5,017	3,884	1,104	1,006
REGULAR INSTRUCTION	925	765	4,804	3,730	1,063	979
SELECTED SUBJECTS(TOTAL)	9	7	213	154	41	27
ART	...	...	99	79	2	1
FOREIGN LANGUAGES	2	...	64	36	...	...
MUSIC	2	1	38	30	24	20
PHYSICAL & HEALTH EDUCATION	5	6	12	9	15	6
SECONDARY SCHOOL						
AGRICULTURE	58	31	72	72	...	19
ART	52	47	265	199	118	125
BUSINESS EDUCATION	216	178	178	140	163	147
DISTRIBUTIVE EDUCATION	7	5	137	99	1	18
ENGLISH LANGUAGE ARTS(TOTAL)	359	305	1,099	921	341	348
ENGLISH	313	265	971	831	280	301
JOURNALISM	2	5	25	15	2	2
SPEECH AND DRAMATIC ARTS	44	35	103	75	59	45
FOREIGN LANGUAGES(TOTAL)	44	35	550	445	135	135
FRENCH	13	21	180	143	46	51
GERMAN	...	...	85	70	13	11
LATIN	1	1	8	1	5	...
RUSSIAN	...	...	18	8	2	6
SPANISH	23	9	253	200	67	67
OTHER	7	4	6	23	2	...
HOME ECONOMICS	119	113	208	154	46	91
INDUSTRIAL ARTS	35	25	168	99	127	116
JUNIOR HIGH SCHOOL(GENERAL)	...	...	...	4	30	28
MATHEMATICS	173	134	250	214	124	122
MUSIC	112	94	114	113	141	143
PHYSICAL & HEALTH EDUCATION	350	274	474	354	263	281
NATURAL & PHYSICAL SCIENCES (TOTAL)	183	122	438	405	172	190
SUBJECT NOT SPECIFIED	6	10	34	37	45	56
GENERAL SCIENCE	15	22	6	10	11	6
BIOLOGY	127	76	315	276	80	91
CHEMISTRY	30	12	57	55	23	27
PHYSICS	5	2	26	27	13	10
SOCIAL STUDIES(TOTAL)	400	262	1,336	1,254	416	420
SUBJECT NOT SPECIFIED	282	219	234	329	118	181
HISTORY, GEOGRAPHY	32	20	769	614	197	157
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	75	23	140	110	38	26
OTHER SOCIAL STUDIES	11	...	193	201	63	56
TRADE, INDUSTRY, TECHNOLOGY	...	...	18	10	...	27
OTHER SECONDARY SUBJECTS	...	10	63	110	17	15
SECONDARY-SCHOOL TOTAL	2,108	1,635	5,370	4,593	2,094	2,225
UNGRADED						
SPECIAL EDUCATION	133	77	128	138	165	170
LIBRARIAN	9	5	85	67	...	3
GUIDANCE COUNSELOR	72	101	181	190	73	90
SCHOOL PSYCHOLOGIST	...	...	77	70	...	...
SCHOOL SOCIAL WORKER	...	...	27	33	...	...
SCHOOL NURSE	...	...	22	25	...	...
OTHER UNGRADED	...	...	80	105	...	15

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	CONNECTICUT		DELAWARE		DISTRICT OF COLUMBIA	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	1,469	1,278	167	143	120	250
REGULAR INSTRUCTION	1,448	1,278	167	143	120	250
SELECTED SUBJECTS(TOTAL)	21	...	...	...	...	...
ART	...	...	...	...	...	...
FOREIGN LANGUAGES	...	...	...	...	...	...
MUSIC	21	...	...	...	...	...
PHYSICAL & HEALTH EDUCATION	...	...	...	...	...	...
SECONDARY SCHOOL						
AGRICULTURE	1	2	2	4	...	...
ART	117	93	9	10	4	23
BUSINESS EDUCATION	55	65	20	15	2	2
DISTRIBUTIVE EDUCATION	2	...	...	...	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	306	287	30	33	66	59
ENGLISH	299	287	29	33	64	59
JOURNALISM	...	...	...	...	...	...
SPEECH AND DRAMATIC ARTS	7	...	1	...	2	...
FOREIGN LANGUAGES(TOTAL)	158	137	15	18	16	24
FRENCH	79	74	7	8	10	9
GERMAN	12	9	1	2	1	4
LATIN	13	15	2	2	1	...
RUSSIAN	4	1	...	...	...	1
SPANISH	48	36	5	6	4	10
OTHER	2	2	...	...	...	...
HOME ECONOMICS	15	21	31	27	1	1
INDUSTRIAL ARTS	32	36	...	...	...	...
JUNIOR HIGH SCHOOL(GENERAL)	3	5	...	...	...	...
MATHEMATICS	121	102	13	17	6	4
MUSIC	48	38	14	7	19	26
PHYSICAL & HEALTH EDUCATION	190	125	42	31	15	11
NATURAL & PHYSICAL SCIENCES (TOTAL)	136	134	9	13	2	4
SUBJECT NOT SPECIFIED	1	3	...	...	...	...
GENERAL SCIENCE	19	22	2	2	...	...
BIOLOGY	91	75	4	9	...	3
CHEMISTRY	22	23	3	1	...	...
PHYSICS	3	11	...	1	2	1
SOCIAL STUDIES(TOTAL)	254	269	34	37	35	55
SUBJECT NOT SPECIFIED	106	140	31	32	20	37
HISTORY, GEOGRAPHY	145	124	3	4	11	16
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	3	2	...	1	2	1
OTHER SOCIAL STUDIES	...	3	...	...	2	1
TRADE, INDUSTRY, TECHNOLOGY	...	...	...	...	...	...
OTHER SECONDARY SUBJECTS	2	...	...	...	...	...
SECONDARY-SCHOOL TOTAL	1,440	1,314	219	212	166	209
UNGRADED						
SPECIAL EDUCATION	133	87	...	4	...	...
LIBRARIAN	61	19	...	...	...	1
GUIDANCE COUNSELOR	70	39	...	2	...	...
SCHOOL PSYCHOLOGIST	...	...	...	...	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	52	39	...	...	...	...

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	FLORIDA		GEORGIA		HAWAII	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	2,368	2,117	1,593	1,247	423	406
REGULAR INSTRUCTION	2,367	2,113	1,573	1,230	423	404
SELECTED SUBJECTS(TOTAL)	1	4	20	17	...	2
ART	...	...	12	10	...	...
FOREIGN LANGUAGES	...	...	1	1	...	...
MUSIC	...	...	6	6	...	1
PHYSICAL & HEALTH EDUCATION	1	4	1	...	...	1
SECONDARY SCHOOL						
AGRICULTURE	19	9	33	15	...	4
ART	139	126	58	37	11	10
BUSINESS EDUCATION	197	170	213	153	8	19
DISTRIBUTIVE EDUCATION	18	14	8	5	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	678	587	424	386	68	83
ENGLISH	576	505	418	377	48	68
JOURNALISM	10	8	...	...	...	...
SPEECH AND DRAMATIC ARTS	92	74	6	9	20	15
FOREIGN LANGUAGES(TOTAL)	137	145	142	108	21	19
FRENCH	29	28	91	60	5	3
GERMAN	14	10	1	3	1	...
LATIN	7	5	4	2	...	...
RUSSIAN	2	1	...	...	...	1
SPANISH	85	101	46	43	3	3
OTHER	...	...	...	...	12	12
HOME ECONOMICS	122	71	155	125	1	20
INDUSTRIAL ARTS	98	67	61	43	4	8
JUNIOR HIGH SCHOOL(GENERAL)	2	7	64	69	...	...
MATHEMATICS	253	180	224	184	19	26
MUSIC	192	151	114	75	12	5
PHYSICAL & HEALTH EDUCATION	402	350	205	148	24	23
NATURAL & PHYSICAL SCIENCES (TOTAL)	155	157	178	182	24	23
SUBJECT NOT SPECIFIED	...	...	77	76	2	7
GENERAL SCIENCE	27	31	45	44	12	5
BIOLOGY	104	94	41	45	9	8
CHEMISTRY	20	27	13	13	1	...
PHYSICS	4	5	2	4	...	3
SOCIAL STUDIES(TOTAL)	693	631	461	309	51	59
SUBJECT NOT SPECIFIED	433	374	296	195	49	59
HISTORY, GEOGRAPHY	186	172	119	89	...	...
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	71	85	46	24	2	...
OTHER SOCIAL STUDIES	3	...	...	1	...	...
TRADE, INDUSTRY, TECHNOLOGY	3	1	5	2	...	...
OTHER SECONDARY SUBJECTS	1	32	...	...	6	...
SECONDARY-SCHOOL TOTAL	3,109	2,698	2,345	1,841	249	299
UNGRADED						
SPECIAL EDUCATION	123	84	123	91	...	1
LIBRARIAN	80	76	38	41	2	...
GUIDANCE COUNSELOR	115	247	125	82	...	...
SCHOOL PSYCHOLOGIST	2	1	4	3	...	...
SCHOOL SOCIAL WORKER	...	...	17	15	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	24	30	173	166	14	...

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	IDAHO		ILLINOIS		INDIANA	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	267	411	2,959	2,572	2,050	2,079
REGULAR INSTRUCTION	263	411	2,839	2,479	2,035	2,065
SELECTED SUBJECTS(TOTAL)	4	...	120	93	15	14
ART	...	...	7	17	4	3
FOREIGN LANGUAGES	...	...	9	4	4	4
MUSIC	4	...	77	50	7	6
PHYSICAL & HEALTH EDUCATION	...	...	27	22	...	1
SECONDARY SCHOOL						
AGRICULTURE	13	17	79	70	33	38
ART	19	27	180	142	146	151
BUSINESS EDUCATION	32	49	245	222	235	224
DISTRIBUTIVE EDUCATION	3	...	...	...	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	76	105	748	649	682	621
ENGLISH	67	90	583	506	575	524
JOURNALISM	2	1	2	1	16	13
SPEECH AND DRAMATIC ARTS	7	14	163	142	91	84
FOREIGN LANGUAGES(TOTAL)	10	13	296	258	292	280
FRENCH	3	3	131	110	106	99
GERMAN	2	3	45	43	27	35
LATIN	2	...	13	10	29	25
RUSSIAN	...	...	12	8	6	4
SPANISH	3	7	93	84	124	117
OTHER	...	...	2	3	...	...
HOME ECONOMICS	23	26	118	105	204	193
INDUSTRIAL ARTS	12	13	139	107	151	136
JUNIOR HIGH SCHOOL(GENERAL)	...	...	80	53	...	...
MATHEMATICS	25	27	346	305	247	256
MUSIC	22	31	209	163	232	196
PHYSICAL & HEALTH EDUCATION	82	85	410	376	415	509
NATURAL & PHYSICAL SCIENCES (TOTAL)	29	52	229	216	604	572
SUBJECT NOT SPECIFIED	3	5	50	52	268	236
GENERAL SCIENCE	5	11	7	1	59	67
BIOLOGY	19	36	125	121	206	204
CHEMISTRY	2	...	32	31	52	51
PHYSICS	...	...	15	11	19	14
SOCIAL STUDIES(TOTAL)	107	128	654	578	713	612
SUBJECT NOT SPECIFIED	43	60	162	149	456	442
HISTORY, GEOGRAPHY	44	53	290	249	193	122
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	13	12	40	29	41	27
OTHER SOCIAL STUDIES	7	3	162	151	23	21
TRADE, INDUSTRY, TECHNOLOGY	...	...	2	2	...	...
OTHER SECONDARY SUBJECTS	25	3	...	49	...	1
SECONDARY-SCHOOL TOTAL	478	576	3,735	3,295	3,954	3,789
UNGRADED						
SPECIAL EDUCATION	2	...	284	252	210	231
LIBRARIAN	1	...	2	4	37	49
GUIDANCE COUNSELOR	20	25	55	41	95	162
SCHOOL PSYCHOLOGIST	...	11	...	...	11	10
SCHOOL SOCIAL WORKER	...	1	...	...	...	...
SCHOOL NURSE	...	...	30	22	...	...
OTHER UNGRADED	8	2	36	30	1	1

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	IOWA		KANSAS		KENTUCKY	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	1,714	1,101	1,528	1,324	1,976	1,835
REGULAR INSTRUCTION	1,693	1,090	1,489	1,253	1,975	1,835
SELECTED SUBJECTS(TOTAL)	21	11	39	71	1	...
ART	5	4	8	18	...	...
FOREIGN LANGUAGES	...	...	2	6	...	...
MUSIC	12	7	22	29	1	...
PHYSICAL & HEALTH EDUCATION	4	...	7	18	...	...
SECONDARY SCHOOL						
AGRICULTURE	30	30	20	10	25	17
ART	122	102	110	99	95	66
BUSINESS EDUCATION	107	102	167	126	254	213
DISTRIBUTIVE EDUCATION	16	3	...	7	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	455	368	413	369	521	456
ENGLISH	382	315	339	319	476	421
JOURNALISM	4	1	7	...	4	...
SPEECH AND DRAMATIC ARTS	69	52	67	50	41	35
FOREIGN LANGUAGES(TOTAL)	244	150	137	141	90	70
FRENCH	87	56	41	69	39	35
GERMAN	39	16	14	16	8	9
LATIN	26	19	3	2	8	4
RUSSIAN	...	...	2	12	2	...
SPANISH	92	56	60	34	33	22
OTHER	...	3	17	8	...	...
HOME ECONOMICS	139	115	140	129	145	128
INDUSTRIAL ARTS	66	54	117	107	131	95
JUNIOR HIGH SCHOOL(GENERAL)	49	50	7	16	15	18
MATHEMATICS	214	153	139	136	155	129
MUSIC	199	155	217	164	188	123
PHYSICAL & HEALTH EDUCATION	392	278	418	288	436	392
NATURAL & PHYSICAL SCIENCES (TOTAL)	196	149	133	137	196	194
SUBJECT NOT SPECIFIED	24	6	22	32	18	24
GENERAL SCIENCE	24	10	14	12	1	1
BIOLOGY	112	105	74	81	143	136
CHEMISTRY	23	22	17	10	31	25
PHYSICS	13	6	6	2	3	8
SOCIAL STUDIES(TOTAL)	514	368	403	343	732	567
SUBJECT NOT SPECIFIED	237	178	183	169	131	143
HISTORY, GEOGRAPHY	213	152	169	146	447	344
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	41	28	33	20	143	80
OTHER SOCIAL STUDIES	23	10	18	8	11	...
TRADE, INDUSTRY, TECHNOLOGY	...	...	6	7	...	...
OTHER SECONDARY SUBJECTS	...	2	...	...	...	...
SECONDARY-SCHOOL TOTAL	2,743	2,079	2,427	2,079	2,983	2,468
UNGRADED						
SPECIAL EDUCATION	56	17	68	50	78	63
LIBRARIAN	17	12	7	11	36	22
GUIDANCE COUNSELOR	...	...	1	2	107	61
SCHOOL PSYCHOLOGIST	...	...	2	2	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	...	18	19	10	...	...

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	LOUISIANA 1968	LOUISIANA 1967	MAINE 1968	MAINE 1967	MARYLAND 1968	MARYLAND 1967
ELEMENTARY-SCHOOL TOTAL	1,619	1,437	343	318	1,152	1,054
REGULAR INSTRUCTION	1,599	1,414	342	317	1,132	1,016
SELECTED SUBJECTS(TOTAL)	20	23	1	1	20	38
ART	2	...	...	...	18	28
FOREIGN LANGUAGES	...	...	1	1	...	...
MUSIC	1	...	...	...	1	3
PHYSICAL & HEALTH EDUCATION	17	23	...	...	1	7
SECONDARY SCHOOL						
AGRICULTURE	29	27	...	...	4	5
ART	52	40	6	4	82	68
BUSINESS EDUCATION	248	146	65	52	42	32
DISTRIBUTIVE EDUCATION	5	3	...	...	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	399	393	124	124	273	240
ENGLISH	315	308	123	124	258	228
JOURNALISM	...	...	...	...	...	...
SPEECH AND DRAMATIC ARTS	84	85	1	...	15	12
FOREIGN LANGUAGES(TOTAL)	116	72	33	40	91	88
FRENCH	61	43	28	26	57	61
GERMAN	1	...	2	1	5	2
LATIN	2	1	1	8	1	1
RUSSIAN	1	...	...	...	...	2
SPANISH	51	28	2	5	27	22
OTHER	...	...	...	...	1	...
HOME ECONOMICS	172	117	54	50	52	54
INDUSTRIAL ARTS	51	41	27	26	17	20
JUNIOR HIGH SCHOOL(GENERAL)	...	7	186	127	...	...
MATHEMATICS	177	150	60	60	144	116
MUSIC	124	97	30	28	67	57
PHYSICAL & HEALTH EDUCATION	371	288	54	56	148	122
NATURAL & PHYSICAL SCIENCES (TOTAL)	148	108	31	37	125	137
SUBJECT NOT SPECIFIED	19	13	1	4	19	...
GENERAL SCIENCE	11	2	3	5	16	20
BIOLOGY	93	74	21	27	72	93
CHEMISTRY	24	14	2	1	14	23
PHYSICS	1	5	4	...	4	1
SOCIAL STUDIES(TOTAL)	365	329	85	137	345	347
SUBJECT NOT SPECIFIED	335	299	55	72	121	113
HISTORY, GEOGRAPHY	23	25	24	46	177	201
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	7	2	6	11	19	17
OTHER SOCIAL STUDIES	...	3	...	8	28	16
TRADE, INDUSTRY, TECHNOLOGY	73	54	...	2	...	1
OTHER SECONDARY SUBJECTS	37	34	1	...	26	2
SECONDARY-SCHOOL TOTAL	2,367	1,906	756	743	1,416	1,289
UNGRADED						
SPECIAL EDUCATION	54	39	17	9	11	8
LIBRARIAN	40	43	...	...	7	4
GUIDANCE COUNSELOR	71	49	...	...	13	8
SCHOOL PSYCHOLOGIST	...	...	...	...	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	38	32	...	...	6	40

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	MASSACHUSETTS		MICHIGAN		MINNESOTA	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	2,328	1,786	4,473	4,272	2,441	2,193
REGULAR INSTRUCTION	2,322	1,737	4,241	4,056	2,399	2,153
SELECTED SUBJECTS(TOTAL)	6	49	232	216	42	40
ART	3	45	108	99	7	7
FOREIGN LANGUAGES	3	2	21	15	3	3
MUSIC	...	2	57	62	13	11
PHYSICAL & HEALTH EDUCATION	...	...	46	40	19	19
SECONDARY SCHOOL						
AGRICULTURE	...	...	29	32	30	30
ART	51	44	392	327	201	172
BUSINESS EDUCATION	113	95	491	417	197	162
DISTRIBUTIVE EDUCATION	...	...	24	22	8	6
ENGLISH LANGUAGE ARTS(TOTAL)	731	523	1,391	1,265	792	669
ENGLISH	707	490	1,156	1,043	643	562
JOURNALISM	...	...	12	9	2	2
SPEECH AND DRAMATIC ARTS	24	33	223	213	147	105
FOREIGN LANGUAGES(TOTAL)	245	193	389	341	278	265
FRENCH	154	126	140	114	89	94
GERMAN	15	13	63	53	73	69
LATIN	15	13	32	34	18	17
RUSSIAN	7	1	24	24	3	3
SPANISH	54	40	130	115	93	82
OTHER	...	...	...	1	2	...
HOME ECONOMICS	98	71	273	251	168	151
INDUSTRIAL ARTS	59	41	180	177	199	144
JUNIOR HIGH SCHOOL(GENERAL)	...	...	10	11	1	1
MATHEMATICS	299	227	506	496	303	275
MUSIC	139	87	263	235	271	202
PHYSICAL & HEALTH EDUCATION	207	169	562	490	360	303
NATURAL & PHYSICAL SCIENCES (TOTAL)	238	196	659	530	312	322
SUBJECT NOT SPECIFIED	59	50	11	7	15	17
GENERAL SCIENCE	25	24	96	88	66	69
BIOLOGY	128	100	446	350	148	170
CHEMISTRY	19	18	63	55	46	44
PHYSICS	7	4	43	30	37	22
SOCIAL STUDIES(TOTAL)	735	452	1,542	1,325	568	492
SUBJECT NOT SPECIFIED	250	139	428	394	199	162
HISTORY, GEOGRAPHY	426	298	818	701	306	272
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	52	3	185	154	37	35
OTHER SOCIAL STUDIES	7	12	111	76	26	23
TRADE, INDUSTRY, TECHNOLOGY	11	8	64	49	...	...
OTHER SECONDARY SUBJECTS	3	4	167	144	2	2
SECONDARY-SCHOOL TOTAL	2,929	2,110	6,942	6,112	3,690	3,196
UNGRADED						
SPECIAL EDUCATION	216	125	567	476	85	75
LIBRARIAN	...	...	105	108	18	15
GUIDANCE COUNSELOR	40	51	92	82	33	27
SCHOOL PSYCHOLOGIST	...	...	12	10	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	1	1	...	...
OTHER UNGRADED	...	...	15	...	12	14

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	MISSISSIPPI		MISSOURI		MONTANA	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	1,233	1,217	1,948	1,748	588	595
REGULAR INSTRUCTION	1,125	1,209	1,921	1,743	588	595
SELECTED SUBJECTS(TOTAL)	108	8	27	5	...	...
ART	103	3	7	1	...	...
FOREIGN LANGUAGES	...	...	13	1	...	...
MUSIC	5	5	6	1	...	...
PHYSICAL & HEALTH EDUCATION	...	...	1	2	...	...
SECONDARY SCHOOL						
AGRICULTURE	48	41	12	7	14	13
ART	41	34	159	125	32	34
BUSINESS EDUCATION	395	225	244	188	97	70
DISTRIBUTIVE EDUCATION	...	...	14	10	...	3
ENGLISH LANGUAGE ARTS(TOTAL)	328	333	730	591	140	130
ENGLISH	275	304	612	514	138	127
JOURNALISM	1	3	...	...	...	...
SPEECH AND DRAMATIC ARTS	52	26	118	77	2	3
FOREIGN LANGUAGES(TOTAL)	40	41	179	160	57	43
FRENCH	15	33	77	70	23	19
GERMAN	...	...	10	10	10	8
LATIN	2	1	8	9	...	1
RUSSIAN	...	...	3	5	...	1
SPANISH	23	7	70	65	24	14
OTHER	...	...	11	1	...	...
HOME ECONOMICS	133	135	189	155	47	48
INDUSTRIAL ARTS	150	63	135	124	43	31
JUNIOR HIGH SCHOOL(GENERAL)	...	...	...	...	1	...
MATHEMATICS	131	148	241	210	47	56
MUSIC	160	125	197	173	32	13
PHYSICAL & HEALTH EDUCATION	382	335	520	48	88	92
NATURAL & PHYSICAL SCIENCES (TOTAL)	214	173	225	192	86	79
SUBJECT NOT SPECIFIED	38	...	3	1	5	9
GENERAL SCIENCE	54	51	8	7	17	17
BIOLOGY	107	96	171	153	54	43
CHEMISTRY	15	26	28	26	7	8
PHYSICS	...	...	15	5	3	2
SOCIAL STUDIES(TOTAL)	454	401	730	577	163	146
SUBJECT NOT SPECIFIED	292	313	362	316	106	103
HISTORY, GEOGRAPHY	91	63	242	177	52	37
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	47	10	36	19	5	6
OTHER SOCIAL STUDIES	24	15	90	65	...	...
TRADE, INDUSTRY, TECHNOLOGY	95	69	...	...	1	4
OTHER SECONDARY SUBJECTS	25	9	14	...	...	1
SECONDARY-SCHOOL TOTAL	2,596	2,132	3,589	2,560	848	763
UNGRADED						
SPECIAL EDUCATION	54	32	107	51	8	21
LIBRARIAN	44	26	7	5	...	...
GUIDANCE COUNSELOR	10	15	86	93	2	5
SCHOOL PSYCHOLOGIST	17	15	...	...	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	2	3	...	...
OTHER UNGRADED	14	23	20	33	...	2

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	NEBRASKA		NEVADA		NEW HAMPSHIRE	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	1,513	1,315	120	118	378	289
REGULAR INSTRUCTION	1,511	1,310	120	118	377	289
SELECTED SUBJECTS(TOTAL)	2	5	...	...	1	...
ART	2	2	...	...	...	...
FOREIGN LANGUAGES	...	...	...	...	1	...
MUSIC	...	2	...	...	...	...
PHYSICAL & HEALTH EDUCATION	...	1	...	...	...	...
SECONDARY SCHOOL						
AGRICULTURE	22	23	6	3	...	3
ART	92	58	5	8	19	22
BUSINESS EDUCATION	195	160	4	12	41	33
DISTRIBUTIVE EDUCATION	...	5	...	...	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	355	324	19	18	102	69
ENGLISH	284	261	19	16	100	68
JOURNALISM	8	11	...	1	...	...
SPEECH AND DRAMATIC ARTS	63	52	...	1	2	1
FOREIGN LANGUAGES(TOTAL)	62	60	7	7	28	20
FRENCH	18	18	2	3	21	18
GERMAN	17	9	2	2	4	...
LATIN	1	3	...	...	1	1
RUSSIAN	...	...	...	...	...	...
SPANISH	26	30	3	2	2	1
OTHER	...	...	...	...	...	...
HOME ECONOMICS	134	108	2	4	...	...
INDUSTRIAL ARTS	92	83	...	...	43	23
JUNIOR HIGH SCHOOL(GENERAL)	1	6	...	...	...	...
MATHEMATICS	166	129	3	3	38	48
MUSIC	124	80	4	3	24	16
PHYSICAL & HEALTH EDUCATION	299	255	41	24	63	59
NATURAL & PHYSICAL SCIENCES (TOTAL)	135	117	14	5	50	27
SUBJECT NOT SPECIFIED	9	5	...	...	5	1
GENERAL SCIENCE	12	11	...	2	17	16
BIOLOGY	84	78	13	2	27	8
CHEMISTRY	21	18	1	...	1	2
PHYSICS	9	5	...	1	...	...
SOCIAL STUDIES(TOTAL)	315	249	26	28	129	93
SUBJECT NOT SPECIFIED	90	78	3	1	51	29
HISTORY, GEOGRAPHY	203	157	19	21	27	25
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	16	6	...	...	4	3
OTHER SOCIAL STUDIES	6	8	4	6	47	36
TRADE, INDUSTRY, TECHNOLOGY	...	...	1	...	...	...
OTHER SECONDARY SUBJECTS	3	4	10	8	...	...
SECONDARY-SCHOOL TOTAL	1,995	1,661	142	123	537	413
UNGRADED						
SPECIAL EDUCATION	43	29	8	6	...	2
LIBRARIAN	6	8	...	...	4	8
GUIDANCE COUNSELOR	62	33	7	...	16	16
SCHOOL PSYCHOLOGIST	...	...	...	...	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	...	...	...	...	37	22

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	NEW JERSEY 1968	NEW JERSEY 1967	NEW MEXICO 1968	NEW MEXICO 1967	NEW YORK 1968	NEW YORK 1967
ELEMENTARY-SCHOOL TOTAL	2,706	2,223	371	373	13,390	8,022
REGULAR INSTRUCTION	2,706	2,223	329	305	13,161	7,911
SELECTED SUBJECTS(TOTAL)	...	...	42	68	229	111
ART	...	...	23	30	56	45
FOREIGN LANGUAGES	...	...	4	13	50	11
MUSIC	...	...	12	21	46	41
PHYSICAL & HEALTH EDUCATION	...	...	3	4	77	14
SECONDARY SCHOOL						
AGRICULTURE	5	...	10	20	114	87
ART	266	237	27	27	832	396
BUSINESS EDUCATION	257	201	45	31	600	376
DISTRIBUTIVE EDUCATION	5	4	...	...	64	51
ENGLISH LANGUAGE ARTS(TOTAL)	750	610	98	136	3,035	1,760
ENGLISH	672	557	81	99	2,589	1,510
JOURNALISM	...	...	1	1	...	...
SPEECH AND DRAMATIC ARTS	78	53	16	36	446	250
FOREIGN LANGUAGES(TOTAL)	281	216	35	29	1,513	1,010
FRENCH	128	107	4	6	1,197	489
GERMAN	17	11	...	...	47	161
LATIN	21	16	...	...	27	41
RUSSIAN	...	1	...	...	13	20
SPANISH	115	79	30	22	226	271
OTHER	...	2	1	1	3	28
HOME ECONOMICS	96	93	47	44	566	283
INDUSTRIAL ARTS	196	153	42	22	271	205
JUNIOR HIGH SCHOOL(GENERAL)	135	67	...	2	74	32
MATHEMATICS	385	294	20	23	1,335	798
MUSIC	158	97	23	24	552	312
PHYSICAL & HEALTH EDUCATION	252	191	146	127	722	382
NATURAL & PHYSICAL SCIENCES (TOTAL)	396	270	47	69	1,418	854
SUBJECT NOT SPECIFIED	210	98	2	2	122	80
GENERAL SCIENCE	85	116	12	7	780	171
BIOLOGY	82	42	31	42	354	416
CHEMISTRY	6	12	1	7	100	119
PHYSICS	13	2	1	11	62	68
SOCIAL STUDIES(TOTAL)	646	529	159	102	3,329	1,624
SUBJECT NOT SPECIFIED	592	475	74	39	2,74[illegible]	1,553
HISTORY, GEOGRAPHY	53	48	78	56	428	60
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	...	4	5	2	136	3
OTHER SOCIAL STUDIES	1	2	2	5	16	8
TRADE, INDUSTRY, TECHNOLOGY	...	...	22	11	40	...
OTHER SECONDARY SUBJECTS	123	95	17	12	106	70
SECONDARY-SCHOOL TOTAL	3,951	3,057	738	679	14,571	8,240
UNGRADED						
SPECIAL EDUCATION	247	207	12	11	597	394
LIBRARIAN	...	...	...	1	602	293
GUIDANCE COUNSELOR	47	7	12	25	777	454
SCHOOL PSYCHOLOGIST	2	...	...	...	299	124
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	10	43	...	...	92	80
OTHER UNGRADED	254	91	43	42	1,432	829

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	NORTH CAROLINA 1968	NORTH CAROLINA 1967	NORTH DAKOTA 1968	NORTH DAKOTA 1967	OHIO 1968	OHIO 1967
ELEMENTARY-SCHOOL TOTAL	2,138	1,919	485	426	4,667	4,654
REGULAR INSTRUCTION	2,138	1,919	462	406	4,603	4,581
SELECTED SUBJECTS(TOTAL)	...	...	23	20	64	73
ART	...	...	10	6	20	23
FOREIGN LANGUAGES	...	...	...	...	4	6
MUSIC	...	...	3	2	30	20
PHYSICAL & HEALTH EDUCATION	...	...	10	12	10	24
SECONDARY SCHOOL						
AGRICULTURE	633	626	15	9	10	45
ART	101	77	25	12	332	319
BUSINESS EDUCATION	339	301	151	113	345	282
DISTRIBUTIVE EDUCATION	3	4	8	3	38	22
ENGLISH LANGUAGE ARTS(TOTAL)	631	584	225	156	1,485	1,292
ENGLISH	603	570	156	116	1,245	1,091
JOURNALISM	...	...	13	8	2	2
SPEECH AND DRAMATIC ARTS	28	14	56	32	238	199
FOREIGN LANGUAGES(TOTAL)	201	165	11	18	475	426
FRENCH	201	165	8	8	203	176
GERMAN	...	...	...	2	66	58
LATIN	...	...	...	...	20	26
RUSSIAN	...	...	1	...	11	11
SPANISH	...	...	2	8	175	155
OTHER	...	...	...	...	...	...
HOME ECONOMICS	204	167	89	50	274	275
INDUSTRIAL ARTS	83	80	34	31	187	144
JUNIOR HIGH SCHOOL(GENERAL)	...	...	...	...	...	...
MATHEMATICS	322	314	104	97	484	476
MUSIC	184	121	55	47	377	356
PHYSICAL & HEALTH EDUCATION	474	405	220	149	838	671
NATURAL & PHYSICAL SCIENCES (TOTAL)	272	266	100	64	534	548
SUBJECT NOT SPECIFIED	...	...	24	14	64	92
GENERAL SCIENCE	35	32	5	10	90	104
BIOLOGY	200	192	57	34	328	282
CHEMISTRY	28	35	14	6	32	55
PHYSICS	9	7	...	...	20	15
SOCIAL STUDIES(TOTAL)	685	570	133	103	1,289	1,156
SUBJECT NOT SPECIFIED	685	570	85	72	704	621
HISTORY, GEOGRAPHY	...	...	50	29	427	414
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	...	...	3	2	36	19
OTHER SOCIAL STUDIES	...	...	...	...	122	102
TRADE, INDUSTRY, TECHNOLOGY	10	6	...	...	32	12
OTHER SECONDARY SUBJECTS	1	...	...	...	10	5
SECONDARY-SCHOOL TOTAL	4,143	3,686	1,175	852	6,710	6,029
UNGRADED						
SPECIAL EDUCATION	63	74	49	45	234	247
LIBRARIAN	66	79	1	2	22	6
GUIDANCE COUNSELOR	144	153	...	...	179	205
SCHOOL PSYCHOLOGIST	3	1	...	...	9	12
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	2
OTHER UNGRADED	...	...	...	...	147	125

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	OKLAHOMA		OREGON		PENNSYLVANIA	
	1968 Est.	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	1,701	1,701	1,025	1,091	5,214	4,610
REGULAR INSTRUCTION	1,633	1,633	1,025	1,091	5,072	4,495
SELECTED SUBJECTS(TOTAL)	68	68	...	...	142	115
ART	11	11	...	...	47	63
FOREIGN LANGUAGES	1	1	...	...	63	36
MUSIC	22	22	...	...	28	16
PHYSICAL & HEALTH EDUCATION	34	34	...	...	4	...
SECONDARY SCHOOL						
AGRICULTURE	122	122	18	25	16	24
ART	97	97	84	80	379	327
BUSINESS EDUCATION	330	330	60	70	423	373
DISTRIBUTIVE EDUCATION	...	...	3	3	42	12
ENGLISH LANGUAGE ARTS(TOTAL)	509	509	330	323	1,704	1,364
ENGLISH	424	424	262	252	1,663	1,319
JOURNALISM	1	1	7	6	...	...
SPEECH AND DRAMATIC ARTS	84	84	61	65	41	45
FOREIGN LANGUAGES(TOTAL)	111	111	120	109	753	708
FRENCH	40	40	35	47	302	299
GERMAN	2	2	21	23	94	88
LATIN	4	4	5	4	40	30
RUSSIAN	...	...	...	2	18	7
SPANISH	65	65	58	32	299	283
OTHER	...	...	1	1	...	1
HOME ECONOMICS	205	205	76	68	397	314
INDUSTRIAL ARTS	161	161	28	10	156	194
JUNIOR HIGH SCHOOL(GENERAL)	...	...	17	24	28	...
MATHEMATICS	221	221	80	101	949	770
MUSIC	198	198	68	69	452	415
PHYSICAL & HEALTH EDUCATION	369	369	214	178	620	579
NATURAL & PHYSICAL SCIENCES (TOTAL)	277	277	114	125	719	756
SUBJECT NOT SPECIFIED	84	84	5	11	77	75
GENERAL SCIENCE	48	48	25	22	76	56
BIOLOGY	114	114	61	72	405	464
CHEMISTRY	26	26	16	18	116	116
PHYSICS	5	5	5	2	45	45
SOCIAL STUDIES(TOTAL)	503	503	255	319	1,666	1,488
SUBJECT NOT SPECIFIED	306	306	225	301	909	865
HISTORY, GEOGRAPHY	126	126	23	14	632	496
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	7	7	7	3	24	50
OTHER SOCIAL STUDIES	64	64	...	1	101	77
TRADE, INDUSTRY, TECHNOLOGY	41	41	10	10	2	1
OTHER SECONDARY SUBJECTS	4	4	53	58	7	3
SECONDARY-SCHOOL TOTAL	3,148	3,148	1,530	1,572	8,313	7,328
UNGRADED						
SPECIAL EDUCATION	114	114	4	2	536	394
LIBRARIAN	27	27	81	70	178	179
GUIDANCE COUNSELOR	108	108	...	...	156	230
SCHOOL PSYCHOLOGIST	...	...	...	...	6	4
SCHOOL SOCIAL WORKER	...	...	...	...	12	12
SCHOOL NURSE	...	...	...	...	125	133
OTHER UNGRADED	...	...	...	...	59	64

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	RHODE ISLAND 1968	RHODE ISLAND 1967	SOUTH CAROLINA 1968	SOUTH CAROLINA 1967	SOUTH DAKOTA 1968	SOUTH DAKOTA 1967
ELEMENTARY-SCHOOL TOTAL	545	502	820	646	641	620
REGULAR INSTRUCTION	516	479	820	646	640	613
SELECTED SUBJECTS(TOTAL)	29	23	...	...	1	7
ART	28	22	...	...	1	3
FOREIGN LANGUAGES	1	1	...	...	...	1
MUSIC	...	...	...	...	...	1
PHYSICAL & HEALTH EDUCATION	...	...	...	...	...	2
SECONDARY SCHOOL						
AGRICULTURE	7	3	31	23	24	22
ART	32	28	40	21	41	36
BUSINESS EDUCATION	66	60	88	81	84	95
DISTRIBUTIVE EDUCATION	...	...	...	...	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	186	123	315	255	221	213
ENGLISH	186	123	292	229	184	188
JOURNALISM	...	...	...	1	...	...
SPEECH AND DRAMATIC ARTS	...	...	23	25	37	25
FOREIGN LANGUAGES(TOTAL)	84	60	74	63	43	39
FRENCH	72	40	47	46	14	11
GERMAN	...	1	2	1	11	11
LATIN	4	3	2	...	1	...
RUSSIAN	...	...	...	...	...	...
SPANISH	5	12	23	16	17	16
OTHER	3	4	...	...	...	1
HOME ECONOMICS	29	13	53	61	73	46
INDUSTRIAL ARTS	25	20	18	16	44	39
JUNIOR HIGH SCHOOL(GENERAL)	...	...	6	...	...	...
MATHEMATICS	82	39	117	102	106	87
MUSIC	7	6	57	56	85	75
PHYSICAL & HEALTH EDUCATION	25	37	138	116	211	160
NATURAL & PHYSICAL SCIENCES (TOTAL)	52	35	138	115	71	85
SUBJECT NOT SPECIFIED	2	2	16	11	3	...
GENERAL SCIENCE	8	1	14	10	1	8
BIOLOGY	38	28	89	71	47	57
CHEMISTRY	1	3	19	23	20	19
PHYSICS	3	1	...	...	...	1
SOCIAL STUDIES(TOTAL)	230	155	324	240	198	183
SUBJECT NOT SPECIFIED	40	47	201	126	32	54
HISTORY, GEOGRAPHY	110	71	69	103	104	95
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	56	11	37	11	46	26
OTHER SOCIAL STUDIES	24	26	17	...	16	8
TRADE, INDUSTRY, TECHNOLOGY	111	90	...	2	7	7
OTHER SECONDARY SUBJECTS	...	...	...	...	...	...
SECONDARY-SCHOOL TOTAL	936	669	1,399	1,151	1,208	1,087
UNGRADED						
SPECIAL EDUCATION	25	16	21	12	10	9
LIBRARIAN	...	...	35	21	2	4
GUIDANCE COUNSELOR	44	36	14	...	20	14
SCHOOL PSYCHOLOGIST	...	...	...	...	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	1	...	...	...	...
OTHER UNGRADED	...	...	12	11	57	55

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	TENNESSEE		TEXAS		UTAH	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	1,542	1,285	5,138	4,832	1,014	971
REGULAR INSTRUCTION	1,542	1,285	4,382	4,215	1,014	971
SELECTED SUBJECTS(TOTAL)	...	...	756	617	...	...
ART	...	...	174	134	...	...
FOREIGN LANGUAGES	...	...	...	...	...	...
MUSIC	...	...	309	279	...	...
PHYSICAL & HEALTH EDUCATION	...	...	273	204	...	...
SECONDARY SCHOOL						
AGRICULTURE	13	17	210	216	14	13
ART	76	56	111	95	48	36
BUSINESS EDUCATION	276	239	584	502	120	111
DISTRIBUTIVE EDUCATION	...	10	...	...	11	10
ENGLISH LANGUAGE ARTS(TOTAL)	732	558	1,630	1,423	258	259
ENGLISH	692	522	1,248	1,124	199	202
JOURNALISM	...	...	50	42	6	6
SPEECH AND DRAMATIC ARTS	40	36	332	257	53	51
FOREIGN LANGUAGES(TOTAL)	112	148	452	382	106	93
FRENCH	41	40	95	97	33	31
GERMAN	3	5	31	25	17	17
LATIN	9	12	25	22	3	1
RUSSIAN	...	...	2	1	2	...
SPANISH	45	48	299	237	51	44
OTHER	14	43	...	...	...	...
HOME ECONOMICS	238	218	524	555	156	140
INDUSTRIAL ARTS	46	45	148	135	82	62
JUNIOR HIGH SCHOOL(GENERAL)	...	...	...	...	...	...
MATHEMATICS	161	155	469	456	75	71
MUSIC	156	160	212	187	62	73
PHYSICAL & HEALTH EDUCATION	461	488	653	594	194	178
NATURAL & PHYSICAL SCIENCES (TOTAL)	383	361	523	423	101	119
SUBJECT NOT SPECIFIED	...	...	9	...	7	10
GENERAL SCIENCE	65	78	113	106	13	15
BIOLOGY	224	210	292	225	72	81
CHEMISTRY	51	42	80	75	4	9
PHYSICS	43	31	29	17	5	4
SOCIAL STUDIES(TOTAL)	891	638	1,287	1,136	307	289
SUBJECT NOT SPECIFIED	95	171	387	345	22	3
HISTORY, GEOGRAPHY	498	329	729	632	160	148
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	163	138	19	35	94	108
OTHER SOCIAL STUDIES	135	...	152	124	31	30
TRADE, INDUSTRY, TECHNOLOGY	1	1	...	...	2	2
OTHER SECONDARY SUBJECTS	33	133	...	...	...	4
SECONDARY-SCHOOL TOTAL	3,579	3,227	6,803	6,104	1,536	1,460
UNGRADED						
SPECIAL EDUCATION	59	48	559	391	77	67
LIBRARIAN	35	22	107	81	9	2
GUIDANCE COUNSELOR	24	18	71	130	38	22
SCHOOL PSYCHOLOGIST	...	...	...	...	4	2
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	9	6	...	...	...	...

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	VERMONT		VIRGINIA		WASHINGTON	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	262	213	1,306	1,111	1,969	1,512
REGULAR INSTRUCTION	260	211	1,292	1,090	1,661	1,276
SELECTED SUBJECTS(TOTAL)	2	2	14	21	308	236
ART	2	2	6	7	99	59
FOREIGN LANGUAGES	...	...	4	6	90	57
MUSIC	...	...	4	6	83	85
PHYSICAL & HEALTH EDUCATION	...	...	...	2	36	35
SECONDARY SCHOOL						
AGRICULTURE	35	14	21	26	1	7
ART	3	1	82	60	122	106
BUSINESS EDUCATION	18	5	197	205	127	99
DISTRIBUTIVE EDUCATION	...	...	45	45	...	...
ENGLISH LANGUAGE ARTS(TOTAL)	84	76	362	337	482	470
ENGLISH	83	76	336	313	383	403
JOURNALISM	...	...	2	1	15	7
SPEECH AND DRAMATIC ARTS	1	...	24	23	84	60
FOREIGN LANGUAGES(TOTAL)	25	12	149	115	154	151
FRENCH	14	7	62	50	60	56
GERMAN	1	1	11	8	28	39
LATIN	4	1	10	13	5	4
RUSSIAN	...	...	...	...	1	5
SPANISH	6	3	62	43	58	46
OTHER	...	...	4	1	2	1
HOME ECONOMICS	16	13	114	121	172	167
INDUSTRIAL ARTS	...	...	56	48	105	67
JUNIOR HIGH SCHOOL(GENERAL)	3	10	17	12	...	...
MATHEMATICS	24	34	153	140	151	113
MUSIC	4	1	114	113	110	96
PHYSICAL & HEALTH EDUCATION	8	10	201	171	296	250
NATURAL & PHYSICAL SCIENCES (TOTAL)	29	29	156	152	200	192
SUBJECT NOT SPECIFIED	8	1	3	6	37	36
GENERAL SCIENCE	11	17	33	23	26	18
BIOLOGY	7	9	94	102	92	99
CHEMISTRY	3	2	15	16	35	30
PHYSICS	...	...	11	5	10	9
SOCIAL STUDIES(TOTAL)	74	55	394	374	435	427
SUBJECT NOT SPECIFIED	50	39	134	108	115	94
HISTORY, GEOGRAPHY	24	16	212	211	241	238
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	...	...	20	31	42	41
OTHER SOCIAL STUDIES	...	...	28	24	37	54
TRADE, INDUSTRY, TECHNOLOGY	...	...	2	3	...	...
OTHER SECONDARY SUBJECTS	...	...	32	18	...	...
SECONDARY-SCHOOL TOTAL	323	260	2,095	1,940	2,355	2,145
UNGRADED						
SPECIAL EDUCATION	9	3	42	27	50	47
LIBRARIAN	2	...	35	29	...	3
GUIDANCE COUNSELOR	...	2	94	68	...	...
SCHOOL PSYCHOLOGIST	...	...	...	...	...	6
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	1	...	...	2
OTHER UNGRADED	...	1	65	65	2	133

TABLE A. -- NUMBER OF STUDENTS COMPLETING PREPARATION FOR STANDARD TEACHING CERTIFICATES, BY TYPE OF PREPARATION, YEAR, AND STATE (CONTINUED)

TYPE OF PREPARATION COMPLETED BY STUDENT	WEST VIRGINIA		WISCONSIN		WYOMING	
	1968	1967	1968	1967	1968	1967
ELEMENTARY-SCHOOL TOTAL	736	583	2,320	2,087	129	124
REGULAR INSTRUCTION	736	583	2,311	2,040	129	124
SELECTED SUBJECTS(TOTAL)	...	...	9	47	...	...
ART	...	...	6	22	...	...
FOREIGN LANGUAGES	...	...	1	9	...	...
MUSIC	...	...	...	16	...	...
PHYSICAL & HEALTH EDUCATION	...	...	2	...	...	...
SECONDARY SCHOOL						
AGRICULTURE	14	7	70	44	4	5
ART	67	46	297	160	19	16
BUSINESS EDUCATION	138	95	127	94	12	9
DISTRIBUTIVE EDUCATION	...	...	3	13	1	2
ENGLISH LANGUAGE ARTS(TOTAL)	361	265	618	562	52	43
ENGLISH	287	210	501	462	45	36
JOURNALISM	4	4	1	...	...	...
SPEECH AND DRAMATIC ARTS	70	51	116	100	7	7
FOREIGN LANGUAGES(TOTAL)	78	34	224	210	17	14
FRENCH	39	23	95	78	9	6
GERMAN	2	1	33	36	1	1
LATIN	4	1	12	10	2	...
RUSSIAN	...	...	3	1	...	...
SPANISH	17	6	81	81	5	7
OTHER	16	3	...	4	...	...
HOME ECONOMICS	106	103	259	183	17	7
INDUSTRIAL ARTS	49	64	326	281	15	5
JUNIOR HIGH SCHOOL(GENERAL)	...	...	36	25	5	1
MATHEMATICS	112	78	251	208	28	22
MUSIC	90	86	200	167	12	13
PHYSICAL & HEALTH EDUCATION	346	286	269	237	46	25
NATURAL & PHYSICAL SCIENCES (TOTAL)	213	179	289	244	31	20
SUBJECT NOT SPECIFIED	12	...	29	25	...	...
GENERAL SCIENCE	29	41	39	32	1	1
BIOLOGY	155	121	140	133	27	14
CHEMISTRY	11	13	54	40	2	3
PHYSICS	6	4	27	14	1	2
SOCIAL STUDIES(TOTAL)	454	321	602	471	38	21
SUBJECT NOT SPECIFIED	...	...	131	113	38	21
HISTORY, GEOGRAPHY	...	...	354	291	...	...
ECONOMICS, SOCIOLOGY, PSYCHOLOGY	...	...	71	34	...	...
OTHER SOCIAL STUDIES	454	321	46	33	...	...
TRADE, INDUSTRY, TECHNOLOGY	...	...	36	30	...	...
OTHER SECONDARY SUBJECTS	5	...	24	12	...	...
SECONDARY-SCHOOL TOTAL	2,033	1,564	3,631	2,941	297	203
UNGRADED						
SPECIAL EDUCATION	9	8	179	132	8	15
LIBRARIAN	17	21	11	13	...	...
GUIDANCE COUNSELOR	...	...	55	38	...	...
SCHOOL PSYCHOLOGIST	...	...	...	...	...	...
SCHOOL SOCIAL WORKER	...	...	...	...	...	...
SCHOOL NURSE	...	...	...	...	...	...
OTHER UNGRADED	...	...	27	10	...	...

TABLE B.--LOW, MEDIAN, HIGH, AND MEAN PERCENTS OF TEACHERS WHO WERE NEW IN 16 STATES AND DISTRICT OF COLUMBIA, 1967-68

Assignment	Low	Median	High	Mean	Number of states reporting
1	2	3	4	5	6
Elementary					
Regular instruction[a]	1.5%	10.8%	53.3%	9.9%	20
Art	0.0	18.0	100.0	13.9	17
Foreign languages	0.0	16.7	50.0	15.1	13
Music	0.0	12.6	32.9	12.0	16
Physical and health education	0.0	17.3	50.0	15.9	16
Special education	1.4	10.2	43.0	12.3	17
Secondary					
Agriculture	0.0	8.0	27.3	8.0	16
Art	0.9	14.3	33.3	12.4	17
Business education	0.8	11.2	18.5	10.6	17
Distributive education	0.0	9.6	42.9	13.4	15
English language arts	1.8	14.4	23.4	13.2	17
Foreign languages	1.1	14.7	31.5	12.1	17
Home economics	1.4	11.7	27.2	10.7	17
Industrial arts	0.9	9.6	22.1	8.4	17
Junior high school	0.0	12.2	20.0	12.1	5
Mathematics	1.3	12.9	21.9	11.8	17
Music	0.0	11.1	20.0	9.9	17
Physical and health education	1.2	11.4	20.7	10.4	17
Men	5.2	10.2	16.4	12.0	8
Women	9.4	14.6	24.8	18.6	8
Natural and physical sciences	1.2	13.8	23.3	11.6	17
Social studies	1.0	12.6	19.6	10.6	17
Trade, industrial, vocational, technical	0.0	10.8	20.7	9.9	14
Special education	0.0	10.6	44.0	7.6	17
Other secondary subjects	0.0	8.0	26.8	9.6	15
Librarian					
Elementary	0.0	11.0	25.9	8.5	17
Secondary	0.0	8.1	13.9	6.4	17
Guidance counselor					
Elementary	0.0	7.8	33.3	11.0	16
Secondary	0.1	2.8	15.4	4.4	17

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a/ Information about total elementary-school teachers was supplied by three additional states.

TABLE C.--LOW, MEDIAN, HIGH, AND MEAN PERCENTS OF NEW TEACHERS WHO WERE RE-ENTERING CLASSROOMS FOLLOWING AN INTERRUPTION OF AT LEAST ONE YEAR, IN 21 STATES AND DISTRICT OF COLUMBIA, 1967-68

Assignment	Low	Median	High	Mean	Number of states reporting
1	2	3	4	5	6
Elementary					
Regular instruction	13.0%	31.1%	90.5%	34.9%	22
Art	0.0	19.5	50.0	18.1	19
Foreign languages	0.0	2.8	100.0	17.6	14
Music	0.0	27.3	100.0	29.6	19
Physical and health education	0.0	19.3	33.3	20.1	19
Special education	4.1	29.6	98.1	31.5	21
Secondary					
Agriculture	0.0	23.7	100.0	30.4	21
Art	0.0	20.6	80.0	21.5	22
Business education	0.0	26.3	80.0	26.3	22
Distributive education	0.0	18.8	100.0	23.6	18
English language arts	11.9	24.0	85.0	26.4	22
Foreign languages	0.0	20.1	75.0	22.1	22
Home economics	11.1	34.0	75.0	33.0	22
Industrial arts	0.0	18.2	100.0	23.3	22
Junior high school	9.6	22.8	57.1	26.0	12
Mathematics	1.6	20.2	80.0	23.7	22
Music	9.1	26.3	100.0	26.2	22
Physical and health education	3.6	18.5	87.5	21.6	22
Men	5.2	10.2	16.4	12.0	13
Women	9.4	14.6	24.8	18.6	13
Natural and physical sciences	8.5	19.2	100.0	22.7	22
Social studies	7.2	20.0	100.0	23.3	22
Trade, industrial, vocational, technical	0.0	25.0	100.0	19.4	19
Special education	0.0	30.4	100.0	36.0	20
Other secondary subjects	0.0	26.3	100.0	32.4	21
Librarian					
Elementary	0.0	33.3	80.0	38.6	19
Secondary	12.3	42.5	78.3	39.0	20
Guidance counselor					
Elementary	0.0	33.3	100.0	57.0	16
Secondary	8.6	75.0	100.0	59.3	21

TABLE D.--RESPONSES TO THE SPECIAL SURVEY OF TEACHER SUPPLY AND DEMAND IN SUMMER 1968, BY STATE

State	Number of qualified teacher applicants compared with vacancies in fall 1968				Supply and demand conditions in fall 1968 compared with 1967				
	Substantial shortage	Some shortage	Sufficient applicants to fill positions	Shortage in some subjects	Much more acute	More acute	About same	Less acute	Much less acute
1	2	3	4	5	6	7	8	9	10
Alabama		X				X			
Alaska	(——Information not available——)								
Arizona		X					X		
Arkansas							X		
California				X			X		
Colorado				X			X		
Connecticut	X						X		
Delaware		X				X			
Florida	(——Information not available——)								
Georgia			X					X	
Hawaii	(——Information not available——)								
Idaho		X				X			
Illinois				X			X		
Indiana				X				X	
Iowa	X					X			
Kansas	X						X		
Kentucky		X					X		
Louisiana				X			X		
Maine	(——Information not available——)								
Maryland				X			X		
Massachusetts				X			X		
Michigan		X						X	
Minnesota	X						X		
Mississippi				X			X		
Missouri		X					X		
Montana		X					X		
Nebraska				X		X			
Nevada				X			X		
New Hampshire				X			X		
New Jersey				X				X	
New Mexico				X			X		
New York	(——Information not available——)								
North Carolina							X		
North Dakota		X					X		
Ohio		X					X		
Oklahoma				X		X			
Oregon		X						X	
Pennsylvania				X				X	
Rhode Island		X							
South Carolina		X				X			
South Dakota	X							X	
Tennessee	(——Information not available——)								
Texas		X					X		
Utah		X				X			
Vermont				X			X		
Virginia		X						X	
Washington				X					
West Virginia				X			X		
Wisconsin		X					X		
Wyoming				X			X		
Total number of states	5	17	1	19	0	8	25	8	0

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